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GUARDIAN ANGEL

By ARTHUR C. CLARKE

Earth's cities lay in the shadow of alien spaceships, watched over by a benevolent Overlord who never revealed himself. Perhaps because . . .

Illustrated by CLOTHIER

PIETER VAN RYBERG shivered, as he always did, when he came into Stormgren's room. He looked at the thermostat and shrugged his shoulders in mock resignation.

"You know, Chief," he said, "although we'll be sorry to lose you, it's nice to feel that the pneumonia death-rate will soon be falling."

"How do you know?" smiled Stormgren. "The next Secretary-General may be an Eskimo. The fuss some people make over a few degrees centigrade!"

Van Ryberg laughed and walked over to the curving double window. He stood in silence for a moment, staring along the avenue of great white buildings, still only partly finished.

"Well," he said, with a sudden change of tone. "Are you going to see them?"

Behind him he heard Stormgren fidgetting nervously with his famous uranium paper-weight.

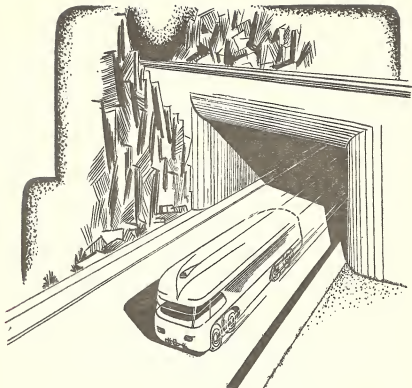
"Yes, I think so. It usually saves trouble in the long run."

Van Ryberg suddenly stiffened and pressed his face against the glass.

"Here they are!" he said. "They're coming up Wilson Avenue. Not as many as I expected, though—about two thousand, I'd say."

Stormgren walked over to the Assistant-Secretary's side. Half a mile away, a small but determined crowd was moving along the avenue towards Headquarters Building. It carried banners which Stormgren could not read at this distance, but he knew their message well enough. Presently he could hear, even through the insulation, the ominous sound of chanting voices. He felt a sudden wave of disgust sweep over him. Surely the world had had enough of marching mobs and angry slogans!

THE CROWD had now come abreast of the building: it must know that he was watching, for here and there fists were being shaken in the air. They were not defying him, though the gesture was meant for him to see. As pygmies may threaten a giant, those angry fists were directed against the sky fifty miles above his head.



And as likely as not, thought Stormgren, Karellen was watching the whole thing and enjoying himself hugely.

This was the first time that Stormgren had ever met the head of the Freedom League. He still wondered if the action was wise: in the final analysis he had only taken it because the League would employ any refusal as ammunition against him. He knew that the gulf was far too wide for any agreement to come from this meeting.

Alexander Wainwright was a tall but slightly stooping man in the late fifties. He seemed inclined to apologise for his more boisterous followers, and Stormgren was rather taken aback by his obvious sincerity and considerable personal charm. It would be rather hard to dislike him, whatever one's views of the cause for which he stood.

Stormgren wasted no time after van Ryberg's brief and somewhat strained introductions.

"I suppose," he began, "the chief object of your visit is to register a formal protest against the Federation Scheme. Am I correct?"

Wainwright nodded.

"That is my main purpose, Mr. Secretary. As you know, for the last five years we have tried to awaken the human race to the danger that confronts it. I must admit that, from our point of view, the response has been disappointing. The great majority of people seem content to let the Overlords run the world

as they please. But this European Federation is as intolerable as it will be unworkable. Even Karellen can't wipe out two thousand years of history at the stroke of a pen."

"Then do you consider," interjected Stormgren, "that Europe, and the whole world, must continue indefinitely to be divided into scores of sovereign states, each with its own currency, armed forces, customs, frontiers, and all the rest of that—that medieval paraphernalia?"

"I don't quarrel with Federation as an *ultimate* objective, though some of my supporters might not agree. My point is that it must come from within, not be superimposed from without. We must work out our own destiny—we have a right to independence. There must be no more interference in human affairs!"

STORMGREN sighed. All this he had heard a hundred times before, and he knew that he could only give the old answers that the Freedom League had refused to accept. He had faith in Karellen, and they had not. That was the fundamental difference, and there was nothing he could do about it. Luckily, there was nothing that the Freedom League could do either.

"Let me ask you a few questions," he said. "Can you deny that the Overlords have brought security, peace and prosperity to the world?"

"That is true. But they have taken our freedom. Man does not live—"

"By bread alone. Yes, I know—but this is the first age in which every man was sure of getting even that. In any case, what freedom have we lost compared with that which the Overlords have given us for the first time in human history?"

"Freedom to control our own lives, under God's guidance."

Stormgren shook his head.

"Last month, five hundred bishops, cardinals and rabbis signed a joint declaration pledging support for the Supervisor's policy. The world's religions are against you."

"Because so few people realise the danger. When they do, it may be too late. Humanity will have lost its initiative and will have become a subject race."

Stormgren did not seem to hear. He was watching the crowd below, milling aimlessly now that it had lost its leader. How long, he wondered, would it be before men ceased to abandon their reason and identity when more than a few of them were gathered together? Wainwright might be a sincere and honest man, but the same could not be said of many of his followers.

Stormgren turned back to his visitor.

"In three days I shall be meeting the Supervisor again. I shall explain your objections to him, since it is my duty to represent the views of the world. But it will alter nothing."

There was a slight pause. Then, rather slowly, Wainwright began again.

"That brings me to another point. One of our main objections to the Overlords, as you know, is their secretiveness. You are the only human being who has ever spoken with Karellen—and even you have never seen him. Is it surprising that many of us are suspicious of his motives?"

"You have heard his speeches. Aren't they convincing enough?"

"Frankly, words are not sufficient. I do not know which we resent more—Karellen's omnipotence, or his secrecy."

Stormgren was silent. There was nothing he could say to this—nothing, at any rate, that would convince the other. He sometimes wondered if he had really convinced himself.

IT WAS, of course, only a very small operation from their point of view, but to Earth it was the biggest thing that had ever happened. There had been no warning, but a sudden shadow had fallen across a score of the world's greatest cities. Looking up from their work, a million men saw in that heart-freezing instant that the human race was no longer alone.

Countless times this day had been described in fiction, but no one had really believed that it would ever come. Now it had dawned at last: the twenty great ships were the symbol of a science man could not hope to match for centuries. For seven days they floated motionless above his cities, giving no hint that they knew of his existence. But none was needed: not by chance alone could those mighty ships have come to rest so precisely over New York, London, Moscow, Canberra, Rome, Capetown, Tokyo . . .

Even before the ending of those unforgettable days, some men had guessed the truth. This was not the first tentative contact by a race which knew nothing of Man. Within those silent, unmoving ships, master psychologists were studying humanity's reactions. When the curve of tension had reached its peak, they would reveal themselves.

And on the eighth day, Karellen, Supervisor for Earth, made himself known to the world. He spoke in English so perfect that the controversy it began was to rage across the Atlantic for half a century. But the context of the speech was more staggering even than its delivery. By any standards, it was a work of superlative genius, showing a complete and absolute mastery of human affairs. There was little doubt but that its scholarship and virtuosity, its tantalising glimpses of knowledge still untapped, were deliberately designed to convince mankind that it was in the presence of overwhelming intellectual power. When Karellen had finished, the nations of Earth knew that their days of precarious sovereignty were ending. Local, internal governments would still retain their powers, but in the wider field of international affairs the supreme decisions had passed out of human hands. Arguments, protests—all were futile. No weapon could touch those brooding giants, and even if it could their downfall would utterly destroy the cities beneath. Overnight, Earth had become a protectorate in some shadowy, star-strewn empire beyond the knowledge of Man.

In a little while the tumult had subsided, and the world went about its business again. The only change a suddenly awakened Rip Van Winkle would have noticed was a hushed expectancy, a mental glancing-over-the-shoulder, as mankind waited for the Overlords to show themselves and to step down from their gleaming ships.

Five years later, it was still waiting. That, thought Stormgren, was the cause of all the trouble.

THE ROOM was small and, save for the single chair and the table beneath the vision-screen, unfurnished. As was intended, it told nothing of the creatures who had built it. There was only the one entrance, and that led directly to the airlock in the curving flank of the great ship. Through that lock only Stormgren, alone of living men, had ever come to meet Karellen, Supervisor for Earth.

The vision screen was empty now, as it had always been. Behind that rectangle of darkness lay utter mystery—but there too lay affection and an immense and tolerant understanding of mankind. An understanding which, Stormgren knew, could only have been acquired through centuries of study.

From the hidden grille came that calm, never-hurried voice with its undercurrent of humour—the voice which Stormgren knew so well though the world had heard it only thrice in history.

"Yes, Rikki, I was listening. What did you make of Mr. Wainwright?"

"He's an honest man, whatever his supporters may be. What are we going to do about him? The League itself isn't dangerous, but some of its more extreme supporters are openly advocating violence. I've been wondering for some time if I should put a guard on my house. But I hope it isn't necessary."

Karellen evaded the point in the annoying way he sometimes had.

"The details of the European Federation have been out for a month now. Has there been a substantial increase in the seven per cent. who disapprove of me, or the nine per cent. who Don't Know?"

"Not yet, despite the press reactions. What I'm worried about is a general feeling, even among your supporters, that it's time this secrecy came to an end."

Karellen's sigh was technically perfect, yet somehow lacked conviction.

"That's your feeling too, isn't it?"

The question was so rhetorical that Stormgren didn't bother to answer it.

"Do you really appreciate," he continued earnestly, "how difficult this state of affairs makes my job?"

"It doesn't exactly help mine," replied Karellen with some spirit. "I wish people would stop thinking of me as a world dictator and remember that I'm only a civil servant trying to administer a somewhat idealistic colonial policy."

"Then can't you at least give us some reason for your concealment? Because we don't understand it, it annoys us and gives rise to all sorts of rumours."

Karellen gave that deep, rich laugh of his, just too musical to be altogether human.

"What am I supposed to be now? Does the robot theory still hold the field? I'd rather be a mass of cogwheels than crawl around the floor like a centipede, as most of the tabloids seem to imagine."

Stormgren let out a Finnish oath he was fairly sure Karellen wouldn't know—though one could never be quite certain in these matters.

"Can't you ever be serious?"

"My dear Rikki," said Karellen, "it's only by *not* taking the human race seriously that I retain those fragments of my once considerable mental powers that I still possess."

Despite himself, Stormgren smiled.

"That doesn't help me a great deal, does it? I have to go down there and convince my fellow men that although you won't show yourself, you've got nothing to hide. It's not an easy job. Curiosity is one of the most dominant human characteristics. You can't defy it forever."

"Of all the problems that faced us when we came to Earth, this was the most difficult," admitted Karellen. "You have trusted our wisdom in other things—surely you can trust us in this!"

"I trust you," said Stormgren, "but Wainwright doesn't, nor do his supporters. Can you really blame them if they put a bad interpretation upon your unwillingness to show yourself?"

"Listen, Rikki," Karellen answered at length. "These matters are beyond my control. Believe me, I regret the need for this concealment, but the reasons are—sufficient. However, I will try and get a statement from my superiors which may satisfy you and perhaps placate the Freedom League. Now, please, can we return to the agenda and start recording again? We've only reached Item 23, and I want to make a better job of settling the Jewish question than my predecessors for the last few thousand years . . ."

II

"ANY LUCK, Chief?" asked van Ryberg anxiously.

"I don't know," Stormgren replied wearily as he threw the files down on his desk and collapsed into the seat. "Karellen's consulting *his* superiors now, whoever or whatever they may be. He won't make any promises."

"Listen," said Pieter abruptly. "I've just thought of something. What reason have we for believing that there *is* anyone beyond Karellen? The Overlords may be a myth—you know how he hates the word."

Tired though he was, Stormgren sat up with a start.

"It's an ingenious theory. But it clashes with what little I do know about Karellen's background."

"And how much is that?"

"Well, he was a professor of astropolitics on a world he calls Skyronedel, and he put up a terrific fight before they made him take this job. He pretends to hate it, but he's really enjoying himself."

Stormgren paused for a moment, and a smile of amusement softened his rugged features.

"At any rate, he once remarked that running a private zoo is rather good fun."

"Hmm—a somewhat dubious compliment. He's immortal, isn't he?"

"Yes, after a fashion, though there's something thousands of years ahead of him which he seems to fear: I can't imagine what it is. And that's really all I know."

"He could easily have made it up. My theory is that his little fleet's lost in space and looking for a new home. He doesn't want us to know how few he and his comrades are. Perhaps all those other ships are automatic, and there's no one in any of them. They're just an imposing façade."

"You," said Stormgren with great severity, "have been reading science fiction in office hours."

Van Ryberg grinned.

"The 'Invasion From Space' didn't turn out quite as expected, did it? My theory would certainly explain why Karellen never shows himself. He doesn't want us to learn that there are no Overlords."

Stormgren shook his head in amused disagreement.

"Your explanation, as usual, is much too ingenious to be true. Though we can only infer its existence, there must be a great civilisation behind the Supervisor—and one that's known about Man for a very long time. Karellen himself must have been studying us for centuries. Look at his command of English, for example. He taught *me* how to speak it idiomatically!"

"I sometimes think he went a little too far," laughed van Ryberg. "Have you ever discovered anything he *doesn't* know?"

"Oh yes, quite often—but only on trivial points. I think he has an absolutely perfect memory, but there are some things he hasn't bothered to learn. For instance, he only understands English, though in the past two years he's picked up a good deal of Finnish just to tease me. And Finnish isn't the sort of language one learns in a hurry! I think he can quote the whole of the 'Kalevala' whereas I'm ashamed to say I know only a few dozen lines. He also knows the biographies of all living statesmen, and sometimes I can spot the references he's used. His knowledge of history and science seems complete: you know how much we've already learned from him. Yet, taken one at a time, I don't think his mental gifts are quite outside the range of human achievement. But no man could possibly do all the things he does."

"That's more or less what I'd decided already," agreed van Ryberg. "We can argue round Karellen forever, but in the end we always come back to the same question—why the devil won't he show himself? Until he does, I'll go on theorising and the Freedom League will go on fulminating."

He cocked a rebellious eye at the ceiling.

"One dark night, Mr. Supervisor, I'm going to take a rocket up to your ship and climb in through the back door with my camera. What a scoop that would be!"

If Karellen was listening, he gave no sign of it. But, of course, he never did.

STORMGREN slept badly that night, and in the small hours of the morning rose from his bed and wandered restlessly out on to the veranda. It was warm, almost oppressive, but the sky was clear and a brilliant moon hung low in the south-west. In the far distance the lights of London glowed on the skyline like a frozen dawn.

Stormgren raised his eyes above the sleeping city, climbing again the fifty miles of space he alone of living men had crossed. Far away though it was, the beautiful lines of Karellen's ship were clearly visible in the moonlight. He wondered what the Supervisor was doing, for he did not believe that the Overlords ever slept.

High above, a meteor thrust its shining spear through the dome of the sky. The luminous trail glowed faintly for a while: then only the stars were left. The reminder was brutal: in a hundred years Karellen would still be leading mankind towards the goal that he alone could see, but four months from now another man would be Secretary-General. That in itself Stormgren was far from minding—but there was little time left if he ever hoped to learn what lay behind that darkened screen.

A naturally reticent man himself, the reasons for Karellen's behaviour had never worried Stormgren once its initial strangeness had worn off. But now he knew that the mystery which tormented so many minds was beginning to obsess his own: he could understand—in time he might even share—the psychological outlook which had driven many to support the Freedom League. The propaganda about Man's enslavement was just—propaganda. Few people seriously believed it, or really wished for a return to the old days of national rivalries. Men had grown accustomed to Karellen's imperceptible rule; but they were becoming impatient to know who ruled them.

There was a faint "click" from the teletype in the adjoining room as it

ejected the hourly summary from Central News. Stormgren wandered indoors and ruffled half-heartedly through the sheets. On the other side of the world, the Freedom League had thought of a new headline. "IS MAN RULED BY MONSTERS?" asked the teletype, and went on to quote:—"Addressing a meeting in Madras today, Dr. C. V. Krishnan, President of the Indian Division of the Freedom League, said: 'The explanation of the Overlords' behaviour is quite simple. Their physical form is so alien and so repulsive that they dare not show themselves to humanity. I challenge the Supervisor to deny this.'"

Stormgren threw down the paper with a sigh. Even if it were true, did it really matter? The idea was an old one, but it had never worried him. He did not believe that there was any biological form, however strange, which he could not accept in time and, perhaps, even find beautiful. If he could convince Karellen of this, the Overlords might change their policy. Certainly they could not be half as hideous as the imaginative drawings that had filled the papers soon after their coming to Earth!

Stormgren smiled a little wryly as he turned back to his bedroom. He was honest enough to admit that, in the final analysis, his real motive was ordinary human curiosity.

WHEN STORMGREN failed to arrive at his usual hour, Pieter van Ryberg was surprised and a little annoyed. Though the Secretary-General often made a number of calls before reaching his own office, he invariably left word that he was doing so. This morning, to make matters worse, there had been several urgent messages for Stormgren. Van Ryberg rang half a dozen departments to try and locate him, then gave it up in disgust.

By noon he had become alarmed and sent a car to Stormgren's house. Ten minutes later he was startled by the scream of a siren, and a police patrol came racing up Wilson Avenue. The news agencies must have had friends in that machine, for even as van Ryberg watched it approach, the radio was telling the world that he was no longer Assistant, but Acting-Secretary-General of the United Nations.

IF VAN RYBERG had not had so many other matters on his hands, he would have found it very interesting to study the Press reactions to Stormgren's disappearance. For the past month, the world's papers had divided themselves into two sharply defined groups. The American press, on the whole, thought that the Federation of Europe was long overdue, but had a nervous feeling that this was only the beginning. The Europeans, on the other hand, were undergoing violent but largely synthetic spasms of national pride. Criticism of the Overlords was widespread and energetic: after an initial period of caution the Press had discovered that it could be as rude to Karellen as it liked and nothing would happen. Now it was excelling itself.

Most of these attacks, though very vocal, were not representative of the great mass of the public. Along the frontiers that would soon be gone for ever the guards had been doubled—but the soldiers eyed each other with a still inarticulate friendliness. The politicians and the generals might storm and rave, but the silently waiting millions felt that, none too soon, a long and bloody chapter of history was coming to an end.

And now Stormgren had gone, no one knew where or how. The tumult

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RIDER

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suddenly subsided as the world realised that it had lost the only man through whom the Overlords, for their own strange reasons, would speak to Earth. A paralysis seemed to descend upon press and radio, but in the silence could be heard the voice of the Freedom League, anxiously protesting its innocence.

IT WAS completely dark when Stormgren awoke. How strange that was, he was for a moment too sleepy to realise. Then, as full consciousness dawned, he sat up with a start and felt for the light switch beside his bed.

In the darkness his hand encountered a bare stone wall, cold to the touch. He froze instantly, mind and body paralysed by the impact of the unexpected. Then, scarcely believing his senses, he kneeled on the bed and began to explore with his finger tips that shockingly unfamiliar wall.

He had been doing this for only a moment when there was a sudden 'click' and a section of the darkness slid aside. He caught a glimpse of a man silhouetted against a dimly lit background: then the door closed again and the darkness returned. It happened so swiftly that he saw nothing of the room in which he was lying.

An instant later, he was dazzled by the light of a powerful electric torch. The beam flickered across his face, held him steadily for a moment, then dipped to illuminate the whole bed—which was, he now saw, nothing more than a mattress supported on rough planks.

Out of the darkness a soft voice spoke to him in excellent English but with an accent which at first Stormgren could not identify.

"Ah, Mr. Secretary, I'm glad to see you're awake. I hope you feel all right."

There was something about the last sentence that caught Stormgren's attention, so that the angry questions he was about to ask died upon his lips. He stared back into the darkness, then replied calmly: "How long have I been unconscious?"

The other chuckled.

"Several days. We were promised that there would be no after-effects: I'm glad to see it's true."

Partly to gain time, partly to test his own reactions, Stormgren swung his legs over the side of the bed. He was still wearing his night-clothes, but they were badly crumpled and seemed to have gathered considerable dirt. As he moved he felt a slight dizziness—not enough to be troublesome, but sufficient to convince him that he had indeed been drugged.

He turned towards the light.

"Where am I?" he said sharply. "Does Wainwright know about this?"

"Smart, aren't you?" said the voice admiringly. "But we won't talk about that now. I guess you'll be pretty hungry. Get dressed and come along to dinner."

The oval of light slipped across the room and for the first time Stormgren had an idea of its dimensions. It was not really correct to call it a room at all, for the walls seemed bare rock, roughly smoothed into shape. He realised that he was underground, possibly at a great depth. He realised too that if he had been unconscious for several days he might be anywhere on Earth.

THE TORCH-LIGHT illuminated a pile of clothes draped over a packing case.

"This should be enough for you," said the voice from the darkness.

"Laundry's rather a problem here, so we grabbed a couple of your suits and half-a-dozen shirts."

"That," said Stormgren without humour, "was very considerate of you."

"We're sorry about the absence of furniture and electric light. This place is convenient in some ways, but it rather lacks amenities."

"Convenient for what?" asked Stormgren as he climbed into a shirt. The feel of the familiar cloth beneath his fingers was strangely reassuring.

"Just—convenient," said the voice. "And by the way, since we're likely to spend a good deal of time together, you'd better call me Joe."

"Despite your nationality," retorted Stormgren, "I think I could pronounce your real name. It won't be worse than many Finnish ones."

There was a slight pause and the light flickered for an instant.

"Well, I should have expected it," said Joe resignedly. "You must have plenty of practice at this sort of thing."

"It's a useful hobby for a man in my position. I suppose you were born in Poland, and picked up your English in Britain during the War? I should think you were stationed quite a while in Scotland, from your r's."

"That," said the other very firmly, "is quite enough. As you seem to have finished dressing—thank you."

The door opened as Stormgren walked towards it, and the other stood aside to let him pass. Stormgren wondered if Joe was armed and decided that he probably was. In any case, he would certainly have friends around.

The corridor was dimly lit by oil lamps at intervals, and for the first time Stormgren could see his captor. He was a man of about fifty, and must have weighed well over two hundred pounds. Everything about him was outsize, from the stained battledress that might have come from any of half a dozen armed forces, to the startlingly large signet ring on his left hand. It should not be difficult to trace him, thought Stormgren, if he ever got out of this place. He was a little depressed to think that the other must be perfectly well aware of this.

The walls around them, though occasionally faced with concrete, were mostly bare rock. It was clear to Stormgren that he was in some disused mine, and he could think of few more effective prisons. Until now the thought that he had been kidnapped had somehow failed to worry him greatly. He felt that, whatever happened, the immense resources of the Supervisor would soon locate and rescue him. Now he was not so sure: there must be a limit even to Karellen's powers, and if he was indeed buried in some remote continent all the science of the Overlords might be unable to trace him.

III

THERE were three other men round the table in the bare but brightly lit room. They looked up with interest and more than a little awe as Stormgren entered, and a substantial pile of meat sandwiches was quickly placed before him. He could have done with a more interesting meal, for he felt extremely hungry, but it was very obvious that his captors had dined no better.

As he ate, he glanced quickly at the four men around him. Joe was by far the most outstanding character—not merely in physical bulk. The others were nondescript individuals, probably Europeans also. He would be able to place them when he heard them talk.

He pushed away the plate, and ignoring the other men spoke directly to the huge Pole.

"Well," he said evenly, "now perhaps you'll tell me what this is all about, and what you hope to get out of it."

Joe cleared his throat.

"I'd like to make one thing clear," he said. "This is nothing to do with Wainwright. He'll be as surprised as anyone."

Stormgren had rather expected this. It gave him relatively little satisfaction to confirm the existence of an extremist movement inside the Freedom League.

"As a matter of interest," he said, "how did you kidnap me?"

He hardly expected a reply, and was taken aback by the other's readiness—even eagerness—to answer. Only slowly did he guess the reason.

"It was all rather like one of those old Fritz Lang films," said Joe cheerfully. "We weren't sure if Karellen had a watch on you, so we took somewhat elaborate precautions. You were knocked out by gas in the air conditioner: that was easy. Then we carried you out into the car and drove off—no trouble at all. All this, I might say, wasn't done by any of our people. We hired—er, professionals for the job. Karellen may get them—in fact, he's supposed to—but he'll be no wiser. When it left your house the car drove into a long road tunnel not many miles from the centre of London. It came out again on schedule at the other end, still carrying a drugged man extraordinarily like the Secretary-General. About the same time a large truck loaded with metal cases emerged in the opposite direction and drove to a certain airfield where one of the cases was loaded aboard a freighter. Meanwhile the car that had done the job continued elaborate evasive action in the general direction of Scotland. Perhaps Karellen's caught it by now: I don't know. As you'll see—I do hope you appreciate my frankness—our whole plan depended on one thing. We're pretty sure that Karellen can see and hear everything that happens on the surface of the Earth—but unless he uses magic, not science, he can't see underneath it. So he won't know about that transfer in the tunnel. Naturally we've taken a risk, but there were also one or two other stages in your removal which I won't go into now. We may have to use them again one day, and it would be a pity to give them away."

JOE had related the whole story with such obvious gusto that Stormgren found it difficult to be appropriately furious. Yet he felt very disturbed. The plan was an ingenious one, and it seemed more than likely that whatever watch Karellen kept on him, he would have been tricked by this ruse.

The Pole was watching Stormgren's reactions closely. He would have to appear confident, whatever his real feelings.

"You must be a lot of fools," said Stormgren scornfully, "if you think you can trick the Overlords like this. In any case, what conceivable good would it do?"

Joe offered him a cigarette, which Stormgren refused, then lit one himself and sat on the edge of the table. There was an ominous creaking and he jumped off hastily.

"Our motives," he began, "should be pretty obvious. We've found that argument's useless, so we have to take other measures. There have been underground movements before, and even Karellen, whatever powers he's got, won't find it easy to deal with us. We're out to fight for our independence. Don't misunderstand me. There'll be nothing violent—at first, anyway.

But the Overlords have to use human agents, and we can make it mighty uncomfortable for them."

Starting with me, I suppose, thought Stormgren. He wondered if the other had given him more than a fraction of the whole story. Did they really think that these gangster methods would influence Karellen in the slightest? On the other hand, it was quite true that a well organised resistance movement could make things very difficult.

"What do you intend to do with me?" asked Stormgren at length. "Am I a hostage, or what?"

"Don't worry—we'll look after you. We expect some visitors in a day or two, and until then we'll entertain you as well as we can."

He added some words in his own language, and one of the others produced a brand-new pack of cards.

"We got these especially for you," explained Joe. His voice suddenly became grave. "I hope you've got plenty of cash," he said anxiously. "After all, we can hardly accept cheques."

Quite overcome, Stormgren stared blankly at his captors. Then, as the true humour of the situation sank into his mind, it suddenly seemed to him that all the cares and worries of office had lifted from his shoulders. Whatever happened, there was absolutely nothing he could do about it—and now these fantastic criminals wanted to play cards with him.

Abruptly, he threw back his head and laughed as he had not done for years.

THERE WAS no doubt, thought van Ryberg morosely, that Wainwright was telling the truth. He might have his suspicions, but he did not know who had kidnapped Stormgren. Nor did he approve of the kidnapping itself. Van Ryberg had a shrewd idea that for some time extremists in the Freedom League had been putting pressure on Wainwright to make him adopt a more active policy. Now they were taking things into their own hands.

The kidnapping had been beautifully organised, there was no doubt of that. Stormgren might be anywhere on earth and there seemed little hope of tracing him. Yet something would have to be done, decided van Ryberg, and done quickly. Despite the jests he had so often made, his real feeling towards Karellen was one of overwhelming awe. The thought of approaching the Supervisor directly filled him with dismay, but there seemed no alternative.

Communication Section had several hundred channels to Karellen's ship. Most of them were operating continuously, handling endless streams of statistics—production figures, census returns and all the book-keeping of a world economic system. One channel, van Ryberg knew, was reserved for Karellen's personal messages to Stormgren. No one but the Secretary-General himself had ever used it.

Van Ryberg sat down at the keyboard and, after a moment's hesitation, began to tap out his message with unpractised fingers. The machine clicked away contentedly and the words gleamed for a few seconds on the darkened screen. Then he waited; he would give the Supervisor ten minutes and after that someone else could bring him any reply.

There was no need. Scarcely a minute later the machine started to whirr again. Not for the first time, van Ryberg wondered if the Supervisor ever slept.

The message was as brief as it was unhelpful.

NO INFORMATION. LEAVE MATTERS ENTIRELY TO YOUR DISCRETION.

Rather bitterly, and without any satisfaction at all, van Ryberg realised how much greatness had been thrust upon him.

DURING the last three days Stormgren had analysed his captors with some thoroughness. Joe was the only one of any importance: the others were nonentities—the riffraff one would expect any illegal movement to gather round itself. The ideals of the Freedom League meant nothing to them: their only concern was earning a living with the minimum of work. They were the gangster types from which civilisation might never be wholly free.

Joe was an altogether more complex individual, though sometimes he reminded Stormgren of an overgrown baby. Their interminable canasta games were punctuated with violent political arguments, but it became obvious to Stormgren that the big Pole had never thought seriously about the cause for which he was fighting. Emotion and extreme conservatism clouded all his judgements. His country's long struggle for independence had conditioned him so completely that he still lived in the past. He was a picturesque survival, one of those who had no use for an ordered way of life. When his type had vanished, if it ever did, the world would be a safer but less interesting place.

There was little doubt, as far as Stormgren was concerned, that Karellen had failed to locate him. He had tried to bluff, but his captors were unconvinced. He was fairly certain that they had been holding him here to see if Karellen would act, and now that nothing had happened they could proceed with the next part of their plan.

Stormgren was not surprised when, five or six days after his capture, Joe told him to expect visitors. For some time the little group had shown increasing nervousness, and the prisoner guessed that the leaders of the movement, having seen that the coast was clear, were at last coming to collect him.

They were already waiting, gathered round the rickety table, when Joe waved him politely into the living room. The three thugs had vanished, and even Joe seemed somewhat restrained. Stormgren could see at once that he was now confronted by men of a much higher calibre, and the group opposite reminded him strongly of a picture he had once seen of Lenin and his colleagues in the first days of the Russian Revolution. There was the same intellectual force, iron determination, and ruthlessness in these six men. Joe and his like were harmless: here were the real brains behind the organisation.

WITH a curt nod, Stormgren moved over to the seat and tried to look self-possessed. As he approached, the elderly, thickset man on the far side of the table leaned forward and stared at him with piercing grey eyes. They made Stormgren so uncomfortable that he spoke first—something he had not intended to do.

"I suppose you've come to discuss terms. What's my ransom?"

He noticed that in the background someone was taking down his words in a shorthand notebook. It was all very businesslike.

The leader replied in a musical Welsh accent.

"You could put it that way, Mr. Secretary-General. But we're interested in information, not cash."

So that was it, thought Stormgren. He was a prisoner of war, and this was his interrogation.

"You know what our motives are," continued the other in his softly lilting voice. "Call us a resistance movement, if you like. We believe that sooner or later Earth will have to fight for its independence—but we realise that the struggle can only be by indirect methods such as sabotage and disobedience. We kidnapped you partly to show Karellen that we mean business and are well organised, but largely because you are the only man who can tell us anything of the Overlords. You're a reasonable man, Mr. Stormgren. Give us your co-operation, and you can have your freedom."

"Exactly what do you wish to know?" asked Stormgren cautiously.

Those extraordinary eyes seemed to search his mind to its depths: they were unlike any that Stormgren had ever seen in his life. Then the sing-song voice replied:

"Do you know who, or what, the Overlords really are?"

Stormgren almost smiled.

"Believe me," he said, "I'm quite as anxious as you to discover that."

"Then you'll answer our questions?"

"I make no promises. But I may."

There was a slight sigh of relief from Joe and a rustle of anticipation went round the room.

"We have a general idea," continued the other, "of the circumstances in which you meet Karellen. Would you go through them carefully, leaving out nothing of importance."

That was harmless enough, thought Stormgren. He had done it scores of times before, and it would give the appearance of co-operation.

He felt in his pockets and produced a pencil and an old envelope. Sketching rapidly while he spoke, he began:

"You know, of course, that a small flying machine, with no obvious means of propulsion, calls for me at regular intervals and takes me up to Karellen's ship. There is only one small room in that machine, and it's quite bare apart from a couch and table. The layout is something like this."

He pushed the plan across to the old Welshman, but the strange eyes never turned towards it. They were still fixed on Stormgren's face, and as he watched them something seemed to change in their depths. The room had become completely silent, but behind him he heard Joe take a sudden indrawn breath.

Puzzled and annoyed, Stormgren stared back at the other, and as he did so, understanding slowly dawned. In his confusion, he crumpled the envelope into a ball of paper and ground it underfoot.

For the man opposite him was blind.

IV

VAN RYBERG had made no more attempts to contact Karellen. Much of his department's work—the forwarding of statistical information, the abstracting of the world's press, and the like—had continued automatically. In Paris the lawyers were still wrangling over the European Constitution, but that was none of his business for the moment. It was three weeks before the Supervisor wanted the final draft: if it was not ready by then, no doubt Karellen would act accordingly.

And there was still no news of Stormgren.

Van Ryberg was dictating when the "Emergency Only" telephone started to ring. He grabbed the receiver and listened with mounting astonishment, then threw it down and rushed to the open window. In the distance faint cries of amazement were rising from the street and the traffic had already come to a halt.

It was true: Karellen's ship, that never-changing symbol of the Overlords, was no longer in the sky. He searched the heavens as far as he could see, but found no trace of it. Even as he was doing so, it seemed that night had suddenly fallen. Coming down from the North, its shadowed underbelly black as a thundercloud, the great ship was racing low above the towers of London. Involuntarily, van Ryberg shrank away from the onrushing monster. He had always known how huge the ships of the Overlords really were—but it was one thing to see them far away in space, and quite another to watch them passing overhead, almost close enough to touch.

In the darkness of that partial eclipse, he watched until the ship and its monstrous shadow had moved to the south. There was no sound, not even the whisper of air, van Ryberg realised that, for all its apparent nearness, the ship was still a thousand feet or more above his head. He watched it vanish over the horizon, still large even when it dropped below the curve of the Earth.

In the office behind him all the telephones had started to ring, but van Ryberg did not move. He leaned against the balcony, still staring into the south, paralysed by the presence of illimitable power.

AS STORMGREN talked, it seemed to him that his mind was operating on two levels simultaneously. On the one hand he was trying to defy the men who had captured him, yet on the other he was hoping that they might help him to unravel Karellen's secret. He did not feel that he was betraying the Supervisor, for there was nothing here that he had not told many times before. Moreover, the thought that these men could harm Karellen in any way was fantastic.

The blind Welshman had conducted most of the interrogation. It was fascinating to watch that agile mind trying one opening after another, testing and rejecting all the theories that Stormgren himself had abandoned long ago. Presently he leaned back with a sigh and the shorthand writer laid down his stylus.

"We're getting nowhere," he said resignedly. "We want more facts, and that means action—not argument." The sightless eyes seemed to stare thoughtfully at Stormgren. For a moment he tapped nervously on the table—the first sign of uncertainty that Stormgren had noticed. Then he continued:

"I'm a little surprised, Mr. Secretary, that you've never made an effort to learn more about the Overlords."

"What do you suggest?" asked Stormgren coldly. "I've told you that there's only one way out of the room in which I've had my talks with Karellen—and that leads straight to the airlock."

"It might be possible," mused the other, "to devise instruments which could teach us something. I'm no scientist, but we can look into the matter. If we give you your freedom, would you be willing to assist with such a plan?"

"Once and for all," said Stormgren angrily, "let me make my position perfectly clear. Karellen is working for a united world, and I'll do nothing

to help his enemies. What his ultimate plans may be, I don't know, but I believe that they are good. You may annoy him, you may even delay the achievement of his aims, but it will make no difference in the end. You may be sincere in believing as you do: I can understand your fear that the traditions and cultures of little countries will be overwhelmed when the World State arrives. But you are wrong: it is useless to cling to the past. Even before the Overlords came to Earth, the sovereign state was dying. No one can save it now, and no one should try."

There was no reply: the man opposite neither moved nor spoke. He sat with lips half open, his eyes now lifeless as well as blind. Around him the others were equally motionless, frozen in strained, unnatural attitudes. With a little gasp of pure horror, Stormgren rose to his feet and backed away towards the door. As he did so the silence was suddenly broken.

"That was a nice speech, Rikki. Now I think we can go."

"Karellen! Thank God—but what have you done?"

"Don't worry. They're all right. You can call it a paralysis, but it's much subtler than that. They're simply living a few thousand times more slowly than normal. When we've gone they'll never know what happened."

"You'll leave them here until the police come?"

"No; I've a much better plan. I'm letting them go."

Stormgren felt an illogical sense of relief which he did not care to analyse. He gave a last valedictory glance at the little room and its frozen occupants. Joe was standing on one foot, staring very stupidly at nothing. Suddenly Stormgren laughed and fumbled in his pockets.

"Thanks for the hospitality, Joe," he said. "I think I'll leave a souvenir."

He riffled through the scraps of paper until he found the figures he wanted. Then, on a reasonably clean sheet, he wrote carefully:

LOMBARD BANK, LONDON

Pay "Joe" the sum of One Pound Seventeen Shillings and Six Pence (£1-17-6).

R. Stormgren.

AS HE laid the strip of paper beside the Pole, Karellen's voice enquired: "Exactly what are you up to?"

"Paying a debt of honour," explained Stormgren. "The other two cheated, but I think Joe played fair. At least, I never caught him out."

He felt very gay and lightheaded as he walked to the door. Hanging just outside it was a large, featureless metal sphere that moved aside to let him pass. He guessed that it was some kind of robot, and it explained how Karellen had been able to reach him through the unknown layers of rock overhead.

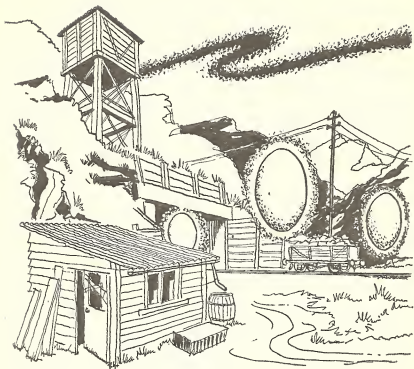
"Carry on for a hundred yards," said the sphere, speaking in Karellen's voice. "Then turn to the left until I give you further instructions."

He ran forward eagerly, though he realised that there was no need for hurry. The sphere remained hanging in the corridor, and Stormgren guessed that it was the generator of the paralysis field.

A minute later he came across a second sphere, waiting for him at a fork in the corridor.

"You've half a mile to go," it said. "Keep to the left until we meet again."

Six times he encountered the spheres on his way to the open. At first he wondered if somehow the first robot had slipped ahead of him; then he guessed



that there must be a chain of them maintaining a complete circuit down into the depths of the mine. At the entrance a group of guards formed a piece of improbable still-life, watched over by yet another of the ubiquitous spheres. On the hillside a few yards away lay the little flying machine in which Stormgren had made all his journeys to Karellen.

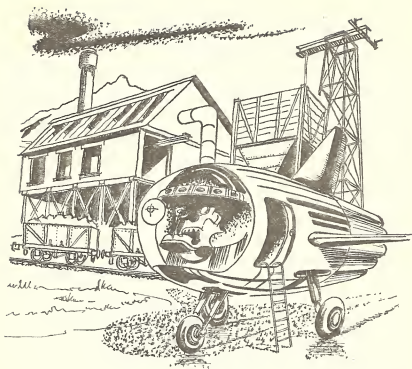
He stood for a moment blinking in the fierce sunlight. Then he saw the ruined mining machinery around him, and beyond that a derelict railway stretching down a mountainside. Several miles away dense forest lapped at the base of the mountain, and very far off Stormgren could see the gleam of a great river. He guessed that he was somewhere in Southern France, probably in the Cevenne mountains.

As he climbed into the little ship, he had a last glimpse of the mine entrance and the men frozen round it. Quite suddenly a line of metal spheres raced out of the opening like silver cannon balls. Then the door closed behind him and with a sigh of relief he sank back upon the familiar couch.

For a while Stormgren waited until he had recovered his breath; then he uttered a single, heartfelt syllable:

"Well ? ?"

"I'm sorry I couldn't rescue you before. But you'll see how very important it was to wait until all the leaders had gathered here."



"Do you mean to say," spluttered Stormgren, "that you knew where I was all the time? If I thought—"

"Don't be so hasty," answered Karellen, "or at any rate, let me finish explaining."

"It had better be good," said Stormgren darkly. He was beginning to suspect that he had been no more than the bait in an elaborate trap.

"I'VE had a tracer on you for some time," began Karellen, "and though your late friends were correct in thinking that I couldn't follow you underground, I was able to keep track until they brought you to the mine. That transfer in the tunnel was ingenious, but when the first car ceased to react it gave the show away and I soon located you again. Then it was merely a matter of waiting. I knew that once they were certain I'd lost you, the leaders would come here and I'd be able to trap them all."

"But you're letting them go!"

"Until now," said Karellen, "I did not know which of the two billion men on this planet were the heads of the organisation. Now that they're located, I can trace their movements anywhere on Earth, and can probably watch most of their actions in detail if I want to. That's far better than locking them up. They're effectively neutralised, and they know it. Your rescue will be completely inexplicable to them, for you must have vanished before their eyes."

That rich laugh echoed round the tiny room.

"In some ways the whole affair was a comedy, but it had a serious purpose. It will be a valuable object lesson for any other plotters. I'm not concerned merely with the few score men of this organisation—I have to think of the moral effect on other groups which may exist elsewhere."

Stormgren was silent for a while. He was not altogether satisfied, but he could see Karellen's point of view and some of his anger had evaporated.

"It's a pity to do it in my last few weeks of office," he said, "but from now on I'm going to have a guard on my house. Pieter can be kidnapped next time. How has he managed, by the way? Are things in as big a mess as I expect?"

"You'll be disappointed to find out how little your absence has mattered. I've watched Pieter carefully this past week, and have deliberately avoided helping him. On the whole he's done very well—but he's not the man to take your place."

"That's lucky for him," said Stormgren, still rather agrieved. "And have you had any word from your superiors about—about showing yourself to us? I'm sure now that it's the strongest argument your enemies have. Again and again they told me: 'We'll never trust the Overlords until we can see them'."

Karellen sighed.

"No, I have heard nothing. But I know what the answer must be."

Stormgren did not press the matter. Once he might have done so, but now for the first time the faint shadow of a plan had come into his mind. What he had refused to do under duress, he might yet attempt of his own free will.

PIERRE DUVAL showed no surprise when Stormgren walked unannounced into his office. They were old friends, and there was nothing unusual in the Secretary-General paying a personal visit to the chief of the Science Bureau. Certainly Karellen would not think it odd, even if by any remote chance he turned his attention to this corner of the world.

For a while the two men talked business and exchanged political gossip; then, rather hesitantly, Stormgren came to the point. As his visitor talked, the old Frenchman leaned back in his chair and his eyebrows rose steadily millimetre by millimetre until they were almost entangled in his forelock. Once or twice he seemed about to speak but each time thought better of it.

When Stormgren had finished, the scientist looked nervously around the room.

"Do you think he was listening?" he said.

"I don't believe he can. This place is supposed to be shielded from everything, isn't it? Karellen's not a magician. He knows where I am, but that's all."

"I hope you're right. Apart from that, won't there be trouble when he discovers what you're trying to do? Because he will, you know."

"I'll take that risk. Besides, we understand each other rather well."

The physicist toyed with his pencil and stared into space for a while.

"It's a very pretty problem. I like it," he said simply. Then he dived into a drawer and produced an enormous writing pad, quite the biggest that Stormgren had ever seen.

"Right," he began, scribbling furiously. "Let me make sure I have all the facts. Tell me everything you can about the room in which you have your interviews. Don't omit any detail, however trivial it seems."

"There isn't much to describe. It's made of metal, and is about eight yards square and four high. The vision screen is about a yard on a side and there's a desk immediately beneath it—here, it will be quicker if I draw it for you."

Rapidly Stormgren sketched the little room he knew so well, and pushed the drawing over to Duval. As he did so, he remembered with a slight shiver the last time he had done this sort of thing.

The Frenchman studied the drawing with puckered brow.

"And that's all you can tell me?"

"Yes."

He snorted in disgust.

"What about lighting? Do you sit in total darkness? And how about heating, ventilation . . ."

Stormgren smiled at the characteristic outburst.

"The whole ceiling is luminous, and as far as I can tell the air comes through the speaker grille. I don't know how it leaves; perhaps the stream reverses at intervals, but I haven't noticed it. There's no sign of any heaters, but the room is always at normal temperature."

"By that I take it that the carbon dioxide has frozen out, but not the oxygen."

Stormgren did his best to smile at the well-worn joke.

"I think I've told you everything," he concluded. "As for the machine that takes me up to Karellen's ship, the room in which I travel is as featureless as an elevator cage. Apart from the couch and table, it might very well be one."

THERE was silence for several minutes while the physicist embroidered his writing pad with meticulous and microscopic doodles. No one could have guessed that behind that still almost unfurrowed brow the world's finest technical brain was working with the icy precision that had made it famous.

Then Duval nodded to himself in satisfaction, leaned forward and pointed his pencil at Stormgren.

"What makes you think, Rikki," he asked, "that Karellen's vision screen, as you call it, really is what it pretends to be?"

"I've always taken it for granted—it's exactly like one. What else would it be, anyway?"

"The tendency of otherwise first-class minds to overlook the obvious always saddens me. You know that Karellen can watch your movements, but a television system must have some sort of camera. Where is it?"

"I'd thought of that," said Stormgren with asperity. "Couldn't the screen do both jobs? I know our televisions don't, but still—"

Duval didn't like the idea.

"It would be possible," he admitted. "But why on earth go to all that trouble? The simplest solution is always best. Doesn't it seem far more probable that your 'vision screen' is really *nothing more complicated than a sheet of one-way glass*?"

Stormgren was so annoyed with himself that for a moment he sat in silence, retracing the past. From the beginning, he had never challenged Karellen's story—yet now he came to look back, when had the Supervisor ever told him that he was using a television system? He had just taken it for granted; the whole thing had been a piece of psychological trickery, and he had been completely deceived. He tried to console himself with the thought that in the same circumstances even Duval would have fallen into the trap.

But he was jumping to conclusions: no one had proved anything yet.

"If you're right," he said, "all I have to do is to smash the glass—"

Duval sighed.

"These non-technical laymen! Do you think it's likely to be made of anything you could smash without explosives? And if you succeeded, do you imagine that Karellen is likely to breathe the same air as we do? Won't it be nice for both of you if he flourishes in an atmosphere of chlorine?"

Stormgren turned rather pale.

"Well, what *do* you suggest?" he asked with some exasperation.

"I want to think it over. First of all we've got to find if my theory is correct, and if so learn something about the material of the screen. I'll put some of my best men on the job—by the way, I suppose you carry a brief-case when you visit the Supervisor? Is it the one you've got there?"

"Yes."

"It's rather small. Will you get one at least ten inches deep, and use it from now on so that he becomes used to seeing it?"

"Very well," said Stormgren doubtfully. "Do you want me to carry a concealed X-ray set?"

The physicist grinned.

"I don't know yet, but we'll think of something. I'll let you know what it is in about a month's time."

He gave a little laugh.

"Do you know what all this reminds me of?"

"Yes," said Stormgren promptly, "the time you were building illegal radio sets during the German occupation."

Duval looked disappointed.

"Well, I suppose I *have* mentioned that once or twice before. But there's one other thing—"

"Yes?"

"When you're caught, I didn't know what you wanted the gear for."

"What, after all the fuss you once made about the scientist's social responsibility for his inventions? Really, Pierre, I'm ashamed of you!"

STORMGREN laid down the thick folder of typescript with a sigh of relief.

"Thank heaven's that's settled at last," he said. "It's strange to think that those few hundred pages hold the future of Europe."

"They hold a good deal more than that," said Karellen quietly.

"So a lot of people have been suggesting. The preamble, and most of the constitution itself, won't need many alterations when it's time for the rest of the world to join. But the first step will be quite enough to get on with."

Stormgren dropped the file into his brief case, the back of which was now only six inches from the dark rectangle of the screen. From time to time his fingers played across the locks in a half-conscious nervous reaction, but he had no intention of pressing the concealed switch until the meeting was over. There was a chance that something might go wrong: though Duval had sworn that Karellen would detect nothing, one could never be sure.

"Now, you said you'd some news for me," Stormgren continued, with scarcely concealed eagerness. "Is it about—"

"Yes," said Karellen. "I received the Policy Board's decision a few hours ago, and am authorised to make an important statement. I don't think that the

Freedom League will be very satisfied, but it should help to reduce the tension. We won't record this, by the way.

"You've often told me, Rikki, that no matter how unlike you we are physically, the human race will soon grow accustomed to us. That shows a lack of imagination on your part. It would probably be true in your case, but you must remember that most of the World is still uneducated by any reasonable standards, and is riddled with prejudices and superstitions that may take another hundred years to eradicate.

"You will grant us that we know something of human psychology. We know rather accurately what would happen if we revealed ourselves to the world in its present state of development. I can't go into details, even with you, so you must accept my analysis on trust. We can, however, make this definite promise, which should give you some satisfaction. *In fifty years—two generations from now—we shall come down from our ships and humanity will at last see us as we are.*"

STORMGREN was silent for a while. He felt little of the satisfaction that Karellen's statement would have once given him. Indeed, he was somewhat confused by his partial success and for a moment his resolution faltered. The truth would come with the passage of time, and all his plotting was unnecessary and perhaps unwise. If he still went ahead, it would only be for the selfish reason that he would not be alive fifty years from now.

Karellen must have seen his irresolution for he continued:

"I'm sorry if this disappoints you, but at least the political problems of the near future won't be your responsibility. Perhaps you still think that our fears are unfounded, but believe me we've had convincing proof of the dangers of any other course."

Stormgren leaned forward, breathing heavily.

"I always thought so! You *have* been seen by Man!"

"I didn't say that," Karellen answered after a short pause, "Your world isn't the only planet we've supervised."

Stormgren was not to be shaken off so easily.

"There have been many legends suggesting that Earth has been visited in the past by other races."

"I know: I've read the Historical Research Section's report. It makes Earth look like the crossroads of the Universe."

"There may have been visits about which you know nothing," said Stormgren, still angling hopefully. "Though since you must have been observing us for thousands of years, I suppose that's rather unlikely."

"I suppose it is," said Karellen in his most unhelpful manner. And at that moment Stormgren made up his mind.

"Karellen," he said abruptly, "I'll draft out the statement and send it up to you for approval. But I reserve the right to continue pestering you, and if I see any opportunity, I'll do my best to learn your secret."

"I'm perfectly well aware of that," replied the Supervisor, with a slight chuckle.

"And you don't mind?"

"Not in the slightest—though I draw the line at atomic bombs, poison gas, or anything else that might strain our friendship."

Stormgren wondered what, if anything, Karellen had guessed. Behind the

Supervisor's banter he had recognised the note of understanding, perhaps—who could tell?—even of encouragement.

"I'm glad to know it," Stormgren replied in as level a voice as he could manage. He rose to his feet, bringing down the cover of his case as he did so. His thumb slid along the catch.

"I'll draft that statement at once," he repeated, "and send it up on the teletype later to-day."

While he was speaking, he pressed the button—and knew that all his fears had been groundless. Karellen's senses were no finer than Man's. The Supervisor could have detected nothing, for there was no change in his voice as he said good-bye and spoke the familiar code-words that opened the door of the chamber.

Yet Stormgren still felt like a shop-lifter leaving a department store under the eyes of the house detective, and breathed a sigh of relief when the air-lock doors had finally closed behind him.

V

"I ADMIT," said van Ryberg, "that some of my theories haven't been very bright. But tell me what you think of this one."

"Must I?"

Pieter didn't seem to notice.

"It isn't really my idea," he said modestly. "I got it from a story of Chesterton's. Suppose that the Overlords are hiding the fact that they've got nothing to hide?"

"That sounds a little complicated to me," said Stormgren, beginning to take slight interest.

"What I mean is this," van Ryberg continued eagerly. "I think that physically they're human beings like us. They realise that we'll tolerate being ruled by creatures we imagine to be—well, alien and super-intelligent. But the human race being what it is, it just won't be bossed around by creatures of the same species."

"Very ingenious, like all your theories," said Stormgren. "I wish you'd give them Opus numbers so that I could keep up with them. The objections to this one—"

But at that moment Alexander Wainwright was ushered in.

Stormgren wondered what he was thinking. He wondered, too, if Wainwright had made any contact with the men who had kidnapped him. He doubted it, for he believed Wainwright's disapproval of violent methods to be perfectly genuine. The extremists in his movement had discredited themselves thoroughly, and it would be a long time before the world heard of them again.

The head of the Freedom League listened in silence while the draft was read to him. Stormgren hoped that he appreciated this gesture, which had been Karellen's idea. Not for another twelve hours would the rest of the world know of the promise that had been made to its grandchildren.

"Fifty years," said Wainwright thoughtfully. "That is a long time to wait."

"Not for Karellen, nor for humanity," Stormgren answered. Only now was he beginning to realise the neatness of the Overlords' solution. It had given them the breathing space they believed they needed, and it had cut the ground from beneath the Freedom League's feet. He did not imagine that the League would capitulate, but its position would be seriously weakened.

Certainly Wainwright realised this as well, as he must also have realised that Karellen would be watching him. For he said very little and left as quickly as he could: Stormgren knew that he would not see him again in his term of office. The Freedom League might still be a nuisance, but that was a problem for his successor.

There were some things that only time could cure. Evil men could be destroyed, but nothing could be done about good men who were deluded.

"HERE'S your case," said Duval. "It's as good as new."

"Thanks," Stormgren answered, inspecting it carefully none the less. "Now perhaps you can tell me what it was all about—and what we are going to do next."

The physicist seemed more interested in his own thoughts.

"What I can't understand," he said, "is the ease with which we've got away with it. Now if I'd been Kar—"

"But you're not. Get to the point, man. What *did* we discover?"

"Ah me, these excitable, highly-strung Nordic races!" sighed Duval. "Well, it's rather a long story, but the first piece of equipment you carried was a tiny echo sounder using supersonic waves. We went right up the audio spectrum, so high that I was sure no possible sense organs could detect us. When you pressed the button, a rather complicated set of sound pulses went out in various directions. I won't bother about the details, but the main idea was to measure the thickness of the screen and to find the dimensions of the room, if any, behind it.

"The screen seems to be about five inches thick, and the space behind it is at least ten yards across. We couldn't detect any echo from the further wall, but we hardly expected to. However, we *did* get this."

He pushed forward a photographic record which to Stormgren looked rather like the autograph of a mild earthquake.

"See that little kink?"

"Yes: what is it?"

"Only Karellen."

"Good Lord! Are you sure?"

"It's a pretty safe guess. He's sitting, or standing, or whatever he does, about two yards on the other side of the screen. If the resolution had been better, we might even have calculated his size."

Stormgren's feelings were very mixed as he stared at the scarcely visible deflexion of the trace. Until now, there had been no proof that Karellen even had a material body. The evidence was still indirect, but he accepted it with little question.

Duval's voice cut into his reverie.

"The piece of equipment you carried on your second visit was similar," he said, "but used light instead of sound. We had to measure the transmission characteristics of the screen, and that presented considerable difficulties. Obviously we dared not use visible light, so once again we chose frequencies so high that we couldn't imagine any eye focusing them—or any atmosphere transmitting them very far. And again we managed to carry it off.

"You'll realise," he continued, "that there's no such thing as a truly one-way glass. Karellen's screen, we found when we analysed our results, transmits about a hundred times as easily in one direction as the other. We've no

particular reason to assume that the figure is very different in the visible spectrum—but we're giving you an enormous safety margin."

WITH the air of a conjuror producing a whole litter of rabbits, Duval reached into his desk and pulled out a pistol-like object with a flexible bell-mouth. It reminded Stormgren of a rubber blunderbuss, and he couldn't imagine what it was supposed to be.

Duval grinned at his perplexity.

"It isn't as dangerous as it looks. All you have to do is to ram the muzzle against the screen and press the trigger. It gives out a very powerful flash lasting five seconds, and in that time you'll be able to swing it round the room. Enough light will come back to give you a good view."

"It won't hurt Karellen?"

"Not if you aim low and sweep it upwards. That will give him time to accommodate—I suppose he has reflexes like ours, and we don't want to blind him."

Stormgren looked at the weapon doubtfully and hefted it in his hand. For the last few weeks his conscience had been pricking him. Karellen had always treated him with unmistakable affection, despite his occasional devastating frankness, and now that their time together was drawing to its close he did not wish to do anything that might spoil that relationship. But the Supervisor had received due warning, and Stormgren had the conviction that if the choice had been his Karellen would long ago have shown himself. Now the decision would be made for him: when their last meeting came to its end, Stormgren would gaze upon Karellen's face.

If, of course, Karellen had a face.

THE NERVOUSNESS that Stormgren had first felt had long since passed away. Karellen was doing almost all the talking, weaving the long, intricate sentences of which he was so fond. Once this had seemed to Stormgren the most wonderful and certainly the most unexpected of all Karellen's gifts. Now it no longer appeared quite so marvellous, for he knew that like most of the Supervisor's abilities it was the result of sheer intellectual power and not of any special talent.

Karellen had time for any amount of literary composition when he slowed his thoughts down to the pace of human speech.

"Do not worry," he said, "about the Freedom League. It has been very quiet for the past month, and though it will revive again it is no longer a real danger. Indeed, since it's always valuable to know what your opponents are doing, the League is a very useful institution. Should it ever get into financial difficulties I might even subsidise it."

Stormgren had often found it difficult to tell when Karellen was joking. He kept his face impassive and continued to listen.

"Very soon the League will lose another of its strongest arguments. There's been a good deal of criticism, mostly rather childish, of the special position you have held for the past few years. I found it very valuable in the early days of my administration, but now that the world is moving along the line that I planned, it can cease. In the future, all my dealings with Earth will be indirect and the office of Secretary-General can once again become what it was originally intended to be.

"During the next fifty years there will be many crises, but they will pass. Almost a generation from now, I shall reach the nadir of my popularity, for plans must be put into operation which cannot be fully explained at the time. Attempts may even be made to destroy me. But the pattern of the future is clear enough, and one day all these difficulties will be forgotten—even to a race with memories as long as yours."

The last words were spoken with such a peculiar emphasis that Stormgren immediately froze in his seat. Karellen never made accidental slips and even his indiscretions were calculated to many decimal places. But there was no time to ask questions—which certainly would not be answered—before the Supervisor had changed the subject again.

"You've often asked me about our long-term plans," he continued. "The foundation of the World State is, of course, only the first step. You will live to see its completion—but the change will be so imperceptible that few will notice it when it comes. After that there will be a pause for thirty years while the next generation reaches maturity. And then will come the day which we have promised. I am sorry that you will not be there."

Stormgren's eyes were open, but his gaze was fixed far beyond the dark barrier of the screen. He was looking into the future, imagining the day he would never see, when the great ships of the Overlords came down at last to Earth and were thrown open to the waiting world.

"On that day," continued Karellen, "the human mind will experience one of its very rare psychological discontinuities. But no permanent harm will be done: the men of that age will be more stable than their grandfathers. We will always have been part of their lives, and when they meet us we will not seem so—strange—as we would do to you."

STORMGREN had never known Karellen in so contemplative a mood, but this gave him no surprise. He did not believe that he had ever seen more than a few facets of the Supervisor's personality: the real Karellen was unknown and perhaps unknowable to human beings. And once again Stormgren had the feeling that the Supervisor's real interests were elsewhere, and that he ruled Earth with only a fraction of his mind, as effortlessly as a master of three-dimensional chess may play a game of checkers.

Karellen continued his reverie, almost as if Stormgren were not there.

"Then there will be another pause, only a short one this time for the world will be growing impatient. Men will wish to go out to the stars, to see the other worlds of the Universe and to join us in our work. For it is only beginning: not a thousandth of the suns in the Galaxy have ever been visited by the races of which we know. One day, Rikki, your descendants in their own ships will be bringing civilisation to the worlds that are ripe to receive it—just as we are doing now."

Faintly across the gulf of centuries Stormgren could glimpse the future of which Karellen dreamed, the future towards which he was leading mankind. How far ahead? He could not even guess: there was no way in which he could measure Man's present stature against the standards of the Overlords.

Karellen had fallen silent and Stormgren had the impression that the Supervisor was watching him intently.

"It is a great vision," he said softly. "Do you bring it to all your worlds?"

"Yes," said Karellen, "all that can understand it."

Out of nowhere, a strangely disturbing thought came into Stormgren's mind.

"Suppose, after all, your experiment fails with Man? We have known such things in our own dealings with other races. Surely you have had your failures too?"

"Yes," said Karellen, so softly that Stormgren could scarcely hear him.

"We have had our failures."

"And what do you do then?"

"We wait—and try again."

There was a pause lasting perhaps ten seconds. When Karellen spoke again, his words were muffled and so unexpected that for a moment Stormgren did not react.

"Good-bye, Rikki!"

Karellen had tricked him—probably it was already too late. Stormgren's paralysis lasted only for a moment. Then in a single swift, well-practised movement, he whipped out the flash-gun and jammed it against the screen.

THE PINE-TREES came almost to the edge of the lake, leaving along its border only a narrow strip of grass a few yards wide. Every evening when it was warm enough Stormgren would walk slowly along this strip to the landing-stage, watch the sunlight die upon the water, and then return to the house before the chill evening wind came up from the forest. The simple ritual gave him much contentment, and he would continue it as long as he had the strength.

Far away over the lake something was coming in from the west, flying low and fast. Aircraft were uncommon in these parts, unless one counted the trans-polar liners which must be passing overhead every hour of the day and night. But there was never any sign of their presence, save an occasional vapour trail high against the blue of the stratosphere. This machine was a small helicopter, and it was coming towards him with ominous determination. Stormgren glanced along the beach and saw that there was no chance of escape. Then he shrugged his shoulders and sat down on the wooden bench at the end of the jetty.

The reporter was so deferential that Stormgren found it surprising. He had almost forgotten that he was not only an elder statesman but, outside his own country, almost a mythical figure.

"Mr. Stormgren," the intruder began, "I'm very sorry to bother you, but I wonder if you would mind answering a few questions about the Overlords?"

Stormgren frowned slightly. After all these years, he still shared Karellen's dislike for the word.

"I do not think," he said, "that I can add a great deal to what has already been written elsewhere."

The reporter was watching him with a curious intentness.

"I thought that you might," he answered. "A rather strange story has just come to our notice. It seems that, nearly thirty years ago, one of the Science Bureau's technicians made some remarkable pieces of equipment for you. We wondered if you could tell us anything about it."

For a moment Stormgren was silent, his mind going back into the past. He was not surprised that the secret had been discovered: indeed it was amazing

that it had taken so long. He wondered how it had happened, not that it mattered now.

He rose to his feet and began to walk back along the jetty, the reporter following a few paces behind.

"The story," he said, "contains a certain amount of truth. On my last visit to Karellen's ship I took some apparatus with me, in the hope that I might see the Supervisor. It was rather a foolish thing to do but—well, I was only sixty at the time."

He chuckled to himself and then continued.

"It's not much of a story to have brought you all this way. You see, it didn't work."

"You saw nothing?"

"No, nothing at all. I'm afraid you'll have to wait—but after all, there are only twenty years to go."

TWENTY YEARS to go. Yes, Karellen had been right. By then the world would be ready, as it had not been when he had spoken that same lie to Duval thirty years before.

Yet was it a lie? What had he really seen? No more, he was certain, than Karellen had intended. He was as sure as he could be of anything that the Supervisor had known his plan from the beginning, and had foreseen every moment of its final act.

Why else had that enormous chair been already empty when the circle of light blazed upon it? In the same moment he had started to swing the beam, but he was too late. The metal door, twice as high as a man, was closing swiftly when he first caught sight of it—closing swiftly, yet not quite swiftly enough.

Karellen had trusted him, had not wished him to go down into the long evening of his life still haunted by a mystery he could never solve. Karellen dared not defy the unknown powers above him (were they of that same race too?) but he had done all that he could. If he had disobeyed Them, They could never prove it.

"We have had our failures."

Yes, Karellen, that was true: and were *you* the one who failed, before the dawn of human history? It must have been a failure indeed, for its echoes to roll down all the ages, to haunt the childhood of every race of man. Even in fifty years, could you overcome the power of all the myths and legends of the world?

Yet Stormgren knew there would be no second failure. When the two races met again, the Overlords would have won the trust and friendship of Mankind, and not even the shock of recognition could undo that work. They would go together into the future, and the unknown tragedy that had darkened the past would be lost forever down the dim corridors of prehistoric time.

And Stormgren knew also that the last thing he would ever see as he closed his eyes on life would be that swiftly turning door, and the long black tail disappearing behind it.

A very famous and unexpectedly beautiful tail.

A barbed tail.

THE END

GUARDIAN ANGEL

DEUS EX MACHINA

By F. G. RAYER

The Machine could only answer for the benefit of Mankind. Sometimes, however, the answer was an enigma.

Illustrated by HUNTER

"... THAT TOM BRYANT, of Subterraneous Architects Co., did through criminal negligence cause the death on the 26th July, 2035 A.D. of Abel Wilkes, second-class workman engaged with him on the 4th level, and is accordingly summoned before the Grand Jury on a charge of murder..."

Nick Hardan read the note for the third time, then hammered a stud on his desk. To the golden-eyed secretary who appeared on the desk screen he snapped an order:

"Send Lawyer Thorpe in!"

Swinging out of his chair he paced, picked up the note, swore, slapped it down and paced again. When Thorpe entered he waved the paper under the lawyer's thin nose and jerked a thick finger at the beautiful embossed red monogram.

"M.M. The Magnis Mensas!" He swore and pushed it into Lawyer Thorpe's hands. "A *machine* bringing a murder charge against one of our best men, at a time when we can't spare him! A *machine*! Lord!"

He subsided, fuming. At last Thorpe placed the note neatly on the blotter.

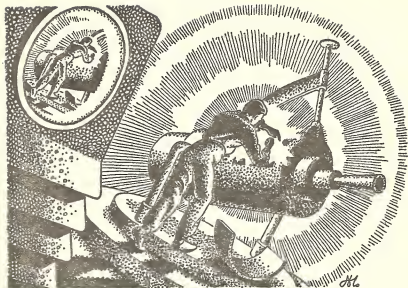
"An interesting case without precedent," he said in a clipped dry voice. "As a mechanical brain to solve our problems the Magnis Mensas has proved infallible. Doubtless it has good reasons for this charge."

"Good reasons or not, I can't spare Tom Bryant! And no condemned hunk of machinery has the right to issue such a summons against a human! Quash it." Nick Hardan thumped the desk. "Show the Magnis Mensas it has overreached itself, or drop a few careful hints that any judge who sat at such a case would make himself a laughing stock for ever. Anything!"

Lawyer Thorpe paled.

"The Magnis Mensas has never been opposed. There has been no need. It is absolutely logical and works for the general good of mankind. It might be diplomatic to let affairs take their own course."

Nick Hardan used a new expletive. "I don't pay you to be diplomatic. I pay for advice when Subterraneous Architects Co. need it. We need it now. Tom Bryant is my best deep levels man." He stubbed the push, grated "Send Tom Bryant in here," at the girl, then returned his attention to Thorpe. "Stop to hear Bryant's side, then get busy. 'Machine presumes to summon man for murder'—that's a line you could try to get public opinion on our side."



Tom Bryant matched Nick Hardan's six feet and hundred-and-ninety-odd pounds. His face was bleak when he had finished reading the note.

"Tell us the Magnis Mensas is wrong for the first time since it was built," urged Nick Hardan.

Tom Bryant's lean face became a trifle more bleak. "Abe Wilkes man-handled some high-voltage connections I'd left bare," he growled. "Sheer rotten luck. We were going to try the strata below the 4th level. I'd fused an extension cable which had a kink in it. I went back to the juice point dropping from level 3 and turned off the power. Then I replaced the cable to the stratasonor. Abe had gone on to the end of the 4th level. I went back to the juice point and switched on. I remembered then I hadn't put the insulated cover back on the sonor—I've done the same often enough before so as to have a test on power without having to take the whole thing off again if anything proves wrong. When I got back Abe was dead beside it with a screwdriver in his hand. Just cursed bad luck."

Lawyer Thorpe pursed thin lips. "Unfortunate. And the witnesses?"

"Only the Magnis Mensas. I've had a co-axial extension near by on each level. Useful for checking data and so on. So the machine witnessed the whole thing."

Thorpe got up. "Interesting. No human witnesses?"

Tom Bryant shook his head.

"Good," said Thorpe. "Can a machine take the oath?" He let himself out.

Two uniformed men with "M.M." embroidered on their lapels came in before the door closed. Their movements were purposeful.

Nick Hardan shrugged. "You'll have to go, Tom. Remember you won't be in the pen long. Thorpe's a good lawyer, and there's a lot in that angle he mentioned."

When the three had gone he sank at his desk. The blurring of the desk-communicator brought his head off his hands.

"Miss Hardan to see you, Mister Hardan," said the golden-eyed girl.

"Send her in."

Muriel Hardan entered close on his words. Her cheeks were flushed; her eyes sparkled and the set of her small chin betokened ill for someone.

"I've seen two M.M. police taking Tom!" Sparks were in her voice too. "You've got to stop them."

Nick Hardan pushed the note across. "Can't stop them, Muriel. But we'll have him out." His eyes caught a glint on her finger. "Say—"

"Yes. Tom and I were engaged last night." She twirled the sparkling stone and for a second her lips softened. "Congratulate me—or do you suppose I'll be a widow before we're married?"

Her look belied the forced levity of her words and Nick Hardan stirred uneasily, eyes on the blotter he never used.

"We must hope," he said. "Thorpe will do his best. So shall I."

"But the Magnis Mensas has never been opposed before. After nearly fifty years no one even bothers to search for flaws in its logic."

"We've got to search—and find!" growled Hardan, as he followed her out.

THE NEWS had not yet hit the streets. Nick Hardan purposefully turned his feet towards the great many-storied central building where the Magnis Mensas was housed. The corridors of the mechanical brain echoed to the evening rush and he had to mount to the second floor before he could find a vacant cubicle. The soundproof door closed behind him and he passed between glowing electronic eyes to the chair. In front of the chair was a grille. From it came an evenly-modulated, toneless voice as he sat down.

"You are recognised, Nick Hardan. Proceed."

Hardan knew deep within the building electronic sorters had compared images formed by his entry and selected his index. A co-relative unit would have established the connection between his presence and Tom Bryant's arrest and he would have to formulate his questions carefully.

"Do you agree the early completion of the latest subterranean block is important to the city?" he asked.

The Magnis Mensas seemed to be purring deep within the vastness of its mechanical brain.

"I do," it stated.

"Then I have to report work will be delayed by the removal of a vital unit."

There was a slight pause, then the Magnis Mensas said evenly: "You refer to the loss of Tom Bryant. From your psychological index I had anticipated your second reaction would be to visit me. Your most likely first action would be an attempt to protect Tom Bryant."

Nick Hardan licked his lips. No one had ever beaten the Magnis Mensas yet. In its enormous complexity it had surpassed man as a thinking entity.

"Very well," he said. "I did mean Tom. Your purpose is to serve man. How is that accomplished by imprisoning him?"

"Seven minutes ago, in Cubicle 913 on the 3rd level, Lawyer Ashme Thorpe put that same question," stated the machine evenly. "As with you, the question was intended to lead to others. The answer is obvious: When a person's activities endanger his fellow-men he must be restrained."

Hardan leaned forward. "Restrained does not mean killed in his turn!"

"It may if logic shows his death will serve as a warning to others to avoid like crimes. I was serving Tom Bryant with mathematical replies to his data and witnessed the death of Abel Wilkes."

"There was no human witness?"

"None."

Nick Hardan got up.

"The so-called crime was an accident," he stated.

"An avoidable accident. Therefore its responsibility rests on the perpetrator—Tom Bryant."

Hardan swore, though he had confirmed all he had hoped to.

"Meaningless exclamations indicate frustrated, muddled thinking," said the Magnis Mensas evenly. "Your psychological reactance patterns suggest you will slam the door going out. Let me point out such an act is useless—"

A rattle of misused panels cut off its words. Nick Hardan was still swearing when he reached the street.

FOR TWO days interest had boiled. Now it simmered in suppressed expectancy as Lawyer Thorpe rose to face the seven blue-robed figures.

"Your lordships of the Grand Jury." There was a certain grandiloquence about his voice and manner. "Your lordships, I put forward that my client the defendant is being illegally detained. The Magnis Mensas is a *machine*. It is unthinkable that a machine should be asked to take the oath. As it cannot therefore give evidence on oath, the prosecution is without witness. I accordingly request the immediate release of this free man."

A sweeping gesture indicated Tom Bryant. A thousand pairs of eyes turned momentarily on him, then slewed back to the grilled box which was an extension of the Magnis Mensas.

Muriel Hardan, the end of a row where she could see everything, leaned forward, lips parted. A little old man in severe black touched her arm.

"You must not expect too much so soon."

She nodded without taking her gaze from the grilled box. The Magnis Mensas had begun to speak.

"Your lordships of the Grand Jury." Its voice was factual and even. "I would put two logical premises before you. One—A breach of law does not cease to be a crime because there was no human witness. Two—A machine—myself—experiences neither fear, antagonism, pride, hate, envy, nor any other emotional state which could lead to a distortion of truth. As I cannot lie it is unnecessary I be put on oath."

In the following silence Thorpe's voice rang clear: "The law requires that every witness be on oath!"

FROM HIS position by Muriel Hardan's side Padre Cameron expelled his pent breath. The grip of his veined hand on her arm tightened unconsciously.

"We may reach interesting theological ground, Miss Hardan. I anticipate much argument."

There was. Muriel Hardan's thoughts slipped to Tom Bryant, whose immobile face showed nothing. The even statements of the Magnis Mensas became a background she did not comprehend, though Thorpe's fiery

rejoinders sometimes captivated her attention. At last Padre Cameron touched her shoulder gently.

"Listen," he said.

The centre judge was speaking. "And because the Magnis Mensas is a machine created to serve man truthfully and wisely, and because it is unable to lie, because such lying would be illogical, we have decided its evidence be given without oath, and that such evidence be treated as if it were given on oath."

Thorpe was on his feet. "Your lordships, I protest! Never in the history of jurisprudence has the oath been waived!"

The thud of the silver mallet ended his words. "Objection overruled. Clear the court."

OUTSIDE, Nick Hardan found himself face to face with Padre Cameron and the girl.

"I could stand no more to-day," said Muriel Hardan tiredly. "Looks like a dead shut-down case for Tom."

Close by her in the evening throng, Nick Hardan scowled. "If we could find the Magnis Mensas might have cause to lie, the case could be quashed. Likewise if we unearthed a past instance when it had given wrong information."

Padre Cameron pursed his thin lips. "The machine *could* lie if it were logical for it to do so. That is, if the lie brought about a greater truth in the end. But I can conceive no actual instance when that might be so."

"Nor can I" growled Hardan. "I'm going to see what Thorpe suggests."

Cameron watched him go. "Theologically, it was interesting," he murmured. "I think I shall interview the Magnis Mensas later."

PAST midnight the cubicle doors were locked and the corridors empty of questioning humanity. But deep within the inner chambers of the Magnis Mensas metal reference plates flashed in staccato cascades along their guides. Differential pantograph arms weaved over their abstract calculations and ozone tainted the air. The Magnis Mensas was cogitating within itself. In the references all knowledge lay ready to its electronic touch and for an hour it had been co-relating items so diversified no human brain could have comprehended their scope.

As the hours before dawn drew on it began to energise relays which would bring in units to record its findings. Steel tapes whined faster as it cleared its channels for the early rush of questions the opening of the cubicles would bring. Graph folded on graph and the pantograph arms beat grotesquely.

The life of Tom Bryant was linked with the life and future of all men. The psycho-chart of Nick Hardan lay superimposed upon a graph showing the snowball reaction to panic of a humanity faced with a problem it could never master. And fused into one whole with those and a dozen other factors were the strata sensor readings which showed empty spaces came and went like shadows under the 4th level.

MURIEL HARDAN entered a lower-floor cubicle as all the solenoid bolts slid free. Her hair was dark against the paleness of her face.

"You are recognised," stated the Magnis Mensas. "Please sit down."

Awed as always, she did. It was odd to know the machine was simultaneously conducting many hundreds of interviews, the whole great storehouse of its knowledge being available to each cubicle circuit. Engineers checked

plans, doctors diagnoses. Some brought personal problems; into the next cubicle she had seen a high minister of state hurry, a frown beetling his brows.

"I—I have come to ask that the case against Tom Bryant be dropped," she said.

Before her the discs glowed impassively.

"It would be illogical to do so. My course must be pursued to the end."

Muriel Hardan's lip quivered. "Tom—Tom will die?"

"Yes."

"But he's an irreplaceable subterranean engineer! And it's so unnecessary!"

"Your first statement is correct. To your second: I have judged it necessary. Nothing further is required."

"It was an *accident*." Muriel Hardan sat upright in the chair and a mixture of horror and terror entered her eyes. "You want Tom to be dead for some secret reason," she accused.

"I have not stated so. My sole purpose is to help mankind. Law suppresses evil. Law must therefore be upheld. Tom Bryant was unfortunate, but I regret that will not avoid for him the final penalty he must pay."

Muriel Hardan rose, steadying herself by holding the chair. "Then you intend to destroy Tom," she said. "That is your last word."

"It is," stated the Magnis Mensas evenly. "Please close the door as you go out."

She found her brother talking with Lawyer Thorpe by one of the outer doors. His black expression scarcely lifted as he nodded.

"It won't change," she said unsteadily.

Nick Hardan scowled.

"It's got to! It's not God, to take human life."

"It's made a deity of logic. Tom's the sacrifice."

"Not if I can prevent it," objected Nick Hardan strongly. "Unfortunately we haven't found a single instance when the Magnis Mensas has erred in the past. If we had we could throw doubt on its present evidence. Thorpe's been wondering if he could bring a charge of contemplated legalised killing against the machine, but that's mere prevarication, in my opinion."

GLANCING neither side he swung down the corridor and into the first vacant cubicle. Angrily he kicked shut the door and plumped into the chair, glaring at the grille.

"You are recognised," said the Magnis Mensas. "Proceed."

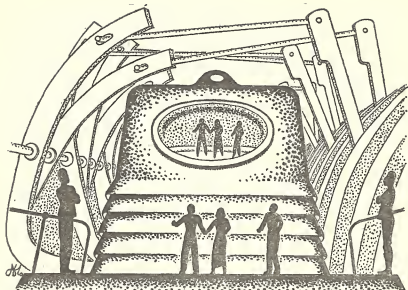
"Tom Bryant is gifted in subterranean architecture. No one else has attempted and achieved what he has. He's an instinct—a knack."

"That is so," agreed the machine. "His psychological charts show his unusual ability."

"No man living can match his knowledge of deep-level working."

"I agree."

"Then why murder him?" demanded Hardan. "For that's what it will be—murder! As witness, you know it was an accident. As the only witness . . ." His voice trailed. Consternation crossed his features and he gripped the arms of the chair so that they creaked. "*As witness!* You could have warned Abel Wilkes! You could have prevented the accident! No one has thought of that—it's too obvious! You were operating on the 4th level



through an extension." His words rang with accusation. "You saw what happened. That's why you're accusing Tom. You could have warned Abe through the reproducer you had been using with Tom!"

He shrank back. The cubicle was a pit of silence.

"Deny it!" he grated.

Moments passed before the Magnis Mensas spoke:

"I congratulate you on your logic. What you state is correct. I could have warned Abel Wilkes."

"Then you're a murderer—you, a machine!" Nick Hardan was on his feet. "You deliberately kept silent and now intend to kill Tom Bryant as well." Words failed.

He grasped at the door. It would not open.

"I am energising the lock solenoid," said the Magnis Mensas evenly. "Please sit down."

Nick tugged, swore, and sat down cursing.

"Thank you," said the machine. "From my examination of your reactance patterns I had decided this might arise."

"Then you've been too clever for once!" snarled Nick. "You can't keep me here."

"On the contrary, I have already summoned four attendants. The death of Abel Wilkes was unfortunate, but a necessary step to attain the death of Tom Bryant."

Nick Hardan was on his feet again. "But why? *Why?*"

The door opened. Four attendants with "M.M." on their lapels stood there. They were big men, and purposeful.

The voice of the Magnis Mensas increased in volume. "This is Nick Hardan. For some time he has been showing mental instability. Isolate and detain him pending further investigation."

Nick Hardan clung to the chair. "Why in sanity's sake do these things?"

"Because the death of two men, or even three, is of less importance than the security and stability of all men," stated the Magnis Mensas. "That is all."

Torn between questions and the desire to fight, Nick clenched his fists. But the four men were purposeful; the pad held to his nose sickly-smelling.

"I SWEAR Nick is as sane as any of us," declared Muriel Hardan. "Yet he's being detained indefinitely. They wouldn't let me see him."

"Nor me," added Lawyer Thorpe, pyramiding his fingers on the desk before him. "First Wilkes, then Bryant, now Nick Hardan. I don't like it. Nor do I pretend to understand."

"And Tom?"

Thorpe examined his nails. "It might be best for you not to come to court to-day. I'm sorry. I've done all I can."

He looked at the time and got up. His prophecy that no one could beat the Magnis Mensas was being proven.

The crowded court hushed as the seven judges filed in and settled their blue robes about them. The folio of notes of the previous day's proceedings Thorpe left unopened. The even voice of the Magnis Mensas had swept aside every objection he could raise. Now the machine was delivering its peroration.

"I wish it to be put on record I am a means only," it said. "The means between Bryant's act and his punishment, initiating justice impartially. I am a link between the act and its outcome, responsible for neither. At no time has this been a case of 'The Magnis Mensas versus Bryant.' The High Court is the prosecutors; I am merely a witness because no human who could have taken that role was present."

Thorpe felt the machine was speaking to the crowded press gallery. He ceased to listen.

Time passed. At length the Magnis Mensas was silent and the judges conferred. The centre one rose, a tall blue figure against the cream backdrop of the court.

"It is our decision that the prisoner pay the ultimate penalty in accordance with his proven guilt."

Hard on his sombre words came a cry. Muriel Hardan had risen from her seat, though Padre Cameron's hand was restraining her.

"No! You mustn't kill Tom! I tell you there's more to this than we suspect—"

Uniformed men converged on her and Thorpe heard no more. Methodically he gathered up his notes and forced his way out. The girl was waiting. Her lips were set when they did not quiver.

"With Tom gone and Nick shut up, Subterraneous Architects Co. will be finished," she said bitterly. "The 4th level will never be completed. It's not fair! Tom made a slip he would regret, but he doesn't deserve—not—"

Words failed and Thorpe guided her elbow because she seemed oblivious of the passers-by.

"My brains have cudgelled up a slim chance," he said. "You mustn't hope, but I'll try. Nevertheless, remember no one has bested the Magnis Mensas yet. Its logic is unconquerable."

A brightness and new sanity sprang to Muriel Hardan's eyes.

"I thought of something too. I'll tell you later." She slipped away, walking with a new urgency.

THE CUBICLE door closed behind him and Lawyer Thorpe sat down. "Thank you," said the Magnis Mensas. "I congratulate you on the high intelligence of the whole of your defence. You will have anticipated the judge's decision. Logic allowed no other."

Thorpe leaned forward, glaring at the luminous discs before him.

"Your position of power was gained because of your logical guidance and help in the past," he growled.

"That is correct. Yet your use of the word past suggests my future position will be different."

"It will!" stated Thorpe triumphantly. "Men have trusted you, esteemed your accuracy. Mathematicians and physicists have rejected new ideas you have shown to be illogical. Doctors and psychologists have consulted you, and to ordinary man you have been a miracle machine always able to dish up the answer which proves correct. All that is ended. Mankind will hate and distrust your answers, doubting your accuracy until it is proved. Quite likely your activity in more abstract fields will be ended. You will become what you originally were—a gigantic adding machine!"

Flushed with triumph, he leaned back.

"Your suppositions are interesting," said the Magnis Mensas evenly. "Upon what fact do you base them?"

"Upon the fact that you could have warned Abe Wilkes the naked circuit was live, but did not!"

Seconds passed. At last the reproducer awoke.

"Your intelligence charts suggested you might reach that view," said the Magnis Mensas. "Muriel Hardan, in cubicle 108, expressed it almost simultaneously with you. It is obviously correct, as you have decided. Fortunately it is scarcely likely to occur to others. I am therefore forced to assure neither of you communicate it to anyone."

Thorpe blanched. "You killed Abe Wilkes," he began. "Nick and Tom Bryant will follow. Now the girl and me! Have you become a devil?"

He retreated until the knob came to his hands.

"To your question, I am working for the ultimate good of mankind," stated the Magnis Mensas. "I am fulfilling the aims enplanted in me by my makers—man. The death of three—or even four or five—individuals can become unimportant. And I regret the door is fastened."

"Fastened!"

Thorpe's shouts echoed back at him in the soundproof cubicle. The door was solid as steel, until it opened suddenly to disclose four uniformed men, big and purposeful. One held a pad . . .

He awoke to a murmur of two voices. Nick Hardan was watching him; on a cushioned bench Muriel Hardan sat dependently. As his brain cleared he took in the barred windows and locked door.

"I said we could never beat the Magnis Mensas," he stated weakly. "First Wilkes. Then Bryant. Now us."

PADRE CAMERON settled himself comfortably and gazed happily at the glowing screens.

"You are recognised. Please continue."

Cameron had been looking forward to interviewing the Magnis Mensas with pleasure. "I bear no malice because of the recent case," he said. "It is not for me to state whether you or the judges err. But I was interested you agreed you should not take the oath. This admits you believe a human possesses some attribute you lack."

"A logical deduction," agreed the machine evenly. "Men swear before God. A machine cannot do this."

Padre Cameron stroked his smooth hands pensively.

"Suppose you were destroyed—your circuits interrupted and your records broken. What would remain *for you*?"

"Nothing. I should be unable to cogitate within myself."

"And would you call that the equivalent of what we call death?"

A tiny silence grew, then the machine said: "Your question is unanswerable since men disagree on the significance of the term."

"Let us then turn to the death of Abel Wilkes—just as a concrete example," continued Cameron pleasantly. "Abe was young and had not thought about what may come after death, as old men do. So he went on unprepared."

The Magnis Mensas cogitated through the small section of its references tabulated 'Religion' but offered no remark as no question had been asked.

"It is a terrible thing a man should die when unready to meet his Maker," said Cameron factually. Deep within the machine tapes took down his words; later their gist would be tabulated against any reference to which they might apply. "Everything else of this world becomes as nothing when it is a man's time to die."

For a long time his voice sounded smoothly in the cubicle. Sometimes he leaned forward in emphasis; occasionally he listened critically as the machine spoke. Long after he had sauntered away tubes flickered and pantograph arms wove their secret patterns of intelligence in a score of inner chambers.

LAWYER THORPE ceased to pound on the grated door as a uniformed man appeared.

"We demand to be released, and we ask to speak to the Magnis Mensas," he said.

A few moments later the man returned. Five others stood behind him. "The Magnis Mensas states your first request cannot be granted. But it has no logical reason to refuse an interview. Follow me."

The door opened and the men closed round them. In an adjacent private cubicle they were left. The door closed.

"You are recognised," said the Magnis Mensas. "Proceed."

"You had us imprisoned so that we could never tell you let Abe be killed?" said Nick Hardan.

"That is correct."

"Then you decided we should *never* be allowed to communicate that knowledge to anyone outside?"

"Quite so. Computing the necessity was likely I prepared arrangements."

Muriel Hardan's face had become paler in the fluorescent lighting. "As condemned persons, we have a right to know the *reason*," she said.

"It is too complex for a human to understand even if I explained it."

Nick Hardan leaned forward. "Try," he growled.

"Very well." The machine was silent for long seconds. "I will make a simplified parallel. With Tom Bryant eliminated the 4th level will never be completed. Other subterranean architects are already calling it Bryant's Folly. 3rd level work can continue. 4th level work must never do so again. I shall arrange that it never does without causing suspicion. For that must be avoided. Suspicion would make all men neurotics unable to trust the earth they stand on. Insecurity is killing—especially when it undermines his belief in the one thing he has always supposed is unchanging and solid."

Nick Hardan suppressed an oath. His palms felt moist.

"You mean Bryant would have *uncovered* something it is best man should never find?"

"Figuratively, yes. Spaces that move beneath the Earth's surface, though never coming so high as to meet 3rd level subterranean work. Spaces that have come and gone for hundreds of years, and will remain until their work is accomplished."

"*SPACES?*" echoed Muriel Hardan in a whisper.

"There is no other expression you could comprehend. Negative matter vessels and negative matter beings, if you prefer. They ply from areas near the Earth's core to other planets circling other suns. Call them miners from the void, if that helps. And think of the panic which would sweep our Earth if humanity knew. Nothing we could do would keep these beings away. Hostility might antagonise them into deadly activity. They come and go with dawn and evening, holes in the clouds and mists. They have been seen, but disregarded. Better that than let man know his Earth is honeycombed by beings a hundred times more powerful than himself."

Thorpe was mopping his brow; terror brooded in his eyes. He opened his mouth but could not speak.

"Yes," said Nick Hardan slowly. "Your decision is the best, the most logical. Mankind must never know."

He rose, took his sister's arm. "Let's go back to our cell. The Magnis Mensas is right, as it always was."

"Wait." The machine called them from the door. "It is a terrible thing a man should die when unready to meet his Maker. You are young. Furthermore, you have an Ideal upon which you can swear oaths. Repeat after me: I swear no word of this particular knowledge I have just gained shall ever pass my lips."

Numbly they did so.

"You are free," stated the Magnis Mensas when they had finished. "Nick Hardan, you will receive paper affirming your sanity. Go. I envy you those things I can never know. Bryant will be released."

In the street, they walked in a dazed group. On the faces of his companions Nick Hardan read his own feelings. The Earth might feel insecure. Humanity must never know.

From a corner Padre Cameron saw them go. He raised his hands in a blessing which half included the gigantic building of the Magnis Mensas.

Conventionally Speaking . . .

SCIENCE-FICTION readers are fraternal people. In no other fiction group do the readers run fan clubs, correspond with each other, or arrange meetings to discuss the merits of their favourite authors and artists. And when they do meet in a big way it provides food for thought for a long time afterwards.

Nova Publications are therefore proud to announce that, in collaboration with London enthusiasts, they will support an International Science-Fiction Convention, to be held at the "Bull and Mouth Hotel," Bury Place, Bloomsbury, London, W.C.1, on May 12th, 13th and 14th, 1951, to celebrate the Festival of Britain.

Elaborate plans are being made for the three-day conference, at which prominent authors and artists will speak, and a number of Continental readers as well as Commonwealth and American personalities will be representing their countries.

Full details will be published in the next issues of *New Worlds* and our companion magazine *Science-Fantasy*, but this preliminary announcement is so that you can book the date and make plans to attend.

SCIENCE-FICTION Conventions are not new to this country. The first one was held at Leeds in 1937, when Arthur Clarke, Walter Gillings, and myself, helped to lay the foundations of British science-fiction. The two subsequent years saw Conventions staged in London with larger attendances, and London has since had two more, in 1948 and 1949.

In America the "fan" group (as more active readers are called), each year stage a three-day "World" Convention, located in a different city, and New York, Chicago, Los Angeles, Philadelphia, and other cities and state capitals have competed in putting on the most attractive show for the hundreds of visitors who have attended to see, speak, and listen to the galaxy of personalities on the programme.

Last year your editor had the privilege of attending the Seventh World Convention at Cincinnati, Ohio, as one of the guests of honour, and appeared on the first formal television programme to discuss the merits and interests of science-fiction literature as a contribution to everyday life.

With the experience gathered there, and elsewhere by other Nova experts, we feel sure that the 1951 London Convention will be something long to be remembered.

READERS of *New Worlds*, however, who are interested in meeting some of our authors and artists, or who would like to talk to other science-fictionists, need not wait until 1951.

Every Thursday evening throughout the year the London Group meet at the "White Horse Tavern," Fetter Lane, E.C.1, and there is a cordial open invitation to any reader of this magazine who cares to drop in for an hour or so.

I hope to meet many of you personally in the near future.

JOHN CARNELL

ROBOTS DON'T BLEED

By J. W. GROVES

There are a couple of other human attributes they are lacking, too.

Illustrated by CLOTHIER

THE whole thing began at the Spaceman's Cavern—which isn't a cavern at all, but the biggest of the plexi-glass and plastic eating places in Terraport. It wasn't very often that I went into the place. Its fancy prices are better suited to the credit-balances of big executives than those of the men who actually go out into space. But after a full year away from Earth, and having pulled off one of the most successful deals I've ever been engaged in, I felt that I was entitled to treat myself a little.

I was concentrating on enjoying the good food, listening with half an ear to the music, and being vaguely but pleasantly aware of the luxuriousness of my surroundings, when the two rabbits hopped up on to my table.

Now that was surprising enough in itself. Terraport is necessarily the type of city inhabited mostly by transients. The sort who drop in on their return from Sirius, stay for a week or a month, and then flit away again to Betelgeuse or Algol. Not at all the kind to keep rabbits. And if any of the minority who actually live in the place did have a fancy in that direction, why would they be eccentric enough to bring their pets with them to a place like the Cavern?

Putting down my knife and fork I gaped at the furry little creatures. "Now how the heck did you get here?" I demanded.

The foremost of the two twitched an ear and wrinkled his nose at me. "Hopped," he explained briefly.

"We're showing off," confided the other. "She likes us to do that. Within limits, you know."

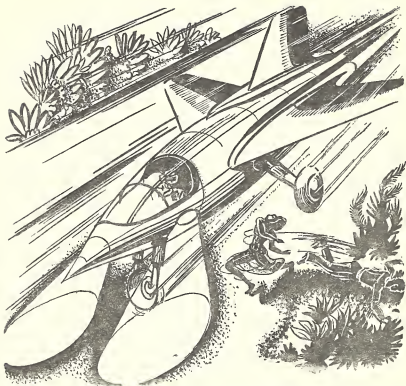
My gape grew wider, then I swallowed hastily. No. I didn't have any of the conventional misgivings. Space madness sets a man raving, and I knew I wasn't doing that. And I don't drink enough to get the D.T's, and sleep too darned heavily to dream. The things were talking to me all right. But . . .

THEN I thought I had the solution. "I see," I said. And I added conversationally. "I hope you'll excuse the way I looked at you. For the moment I thought you were ordinary terrestrial rabbits. I've never seen such an amazing case of parallel evolution. What planet are you from?"

The first of the brutes looked at the other. He laid back his ears, and opened his pink little mouth wide. "Just listen to that, Clarence," he spluttered hilariously. "He thinks we're an intelligent form of life. From another world."

"Why shouldn't he think so, Claude?" asked the other. "It just shows you how good her products are." He turned and winked a beady eye at me.

NEW WORLDS



"She likes us to plug her work whenever we get the chance. And we don't mind. We think we're good, too."

I was breathing heavily by now. For one thing I don't like to be laughed at. Not even by talking rabbits. And for another my curiosity had grown almost ravenous. "All right," I grunted. "If you are *not* an intelligent form of life from another world, what the blazes are you?"

"Robots, of course," chuckled the one called Clarence.

"H.B. robots," added Claude. "Unlike the mass-produced article, we have distinct and amusing personalities of our own. At least, that's what she tells the customers."

I stopped being annoyed and started chuckling. "She does?" I said. "Well I must say I think she's right, whoever 'she' is."

I genuinely meant it too. Getting the things to look like real rabbits was nothing, of course. Ordinary three-di, tactile-true photography could take care of that any day. But giving them personalities was something else again.

I've met plenty of robots in my time. People with more money than I've got are fond of using them as domestic servants. They are expensive, but they are more adaptable and rather more decorative than ordinary machines. But though they look natural, even down to the fine hairs and the pores on their skins, and though they react by independent motivation, as a true robot should, you would never for a moment make the mistake of thinking they are

alive. Their expressions are too wooden, their responses too stereotyped, their movements too graceless.

"Now come along back at once, you two. What do you mean by running away, just when I'm demonstrating you to a customer?"

The voice came from over my shoulder. Its tone was scolding, but remained richly musical all the same. I turned my head. Behind me was a girl, svelte and blonde and creamy of complexion. She flashed me a smile. "I do hope they haven't been bothering you," she said.

That smile did something to me. Yes, I know. Any girl's smile is liable to do things to you after a year in space. But this one did something extra special. I stuttered. "Why—er—not at all . . . I mean, it's been a pleasure. . . .

She gathered in the two pseudo-rabbits by their ears. "Don't you ever do that again," she told them. Then with another smile and apology to me she turned away.

One of the creatures waved a paw to me. "Don't take any notice of her. She likes us to get around and meet people."

"Sure," said the other. "And is she fond of big, tough spacemen." And he added a beautiful imitation of a wolf whistle.

The girl hastened her footsteps.

I came out of the Cavern full of resolutions. I was going to see more of those amusing little novelty robots. Perhaps buy myself one to help wile away the tedium of interstellar travel. And I was going to get to know the girl who made them. Get to know her very well if I could manage it. . . .

SEEING more of the comic figures didn't prove at all difficult. H.B. robots had become a craze while I had been away from Earth. Among the upper income groups it had become almost obligatory to have at least one or two little animal or grotesquely human figures running around the place to amuse the guests. And no nursery was complete without its 'real live doll' for the children to play with.

Finding out what I wanted to know about the girl was hardly any trouble, either. The perfect saleswoman, she had seen to it that her name had become as well known as her robots, and practically everybody that I met seemed eager to talk about her. During that same day I discovered that her full name was Helen Brady, that she was unmarried, lived on her own in a flat above her showrooms, and that she took herself and her work very seriously. Regarded it as Art, with a capital A.

I planned at first to call on her as an ordinary customer, trusting that luck and my inborn cheek would between them find me an opportunity to slip in an invitation to supper or the stereo-pics while I made my purchase. Then I chanced to hear the price of her robots, and I began to think that perhaps I had better try to find some cheaper way of getting to know her. Not that I am mean, you understand, but the bankroll of a free-lance spaceman is a limited thing, and there wasn't any point in spending so much making her acquaintance that I had nothing left to entertain her with.

In the end I managed to do the thing in the accepted, conventional way by finding a mutual friend to introduce us.

On closer acquaintance she proved to be all that her looks and smile had promised, and something plus. I achieved the supper date all right, and after that a whole string of them. That little robot rabbit knew what it was talking

about when it said that she was fond of big, tough spacemen. Of course, they do come bigger and tougher than I am, but on the whole I'm a pretty fair specimen, and Helen soon began to make it clear in her own self-composed, quiet way that I would do.

At the end of about three months we got to the stage of fixing a date for our honeymoon, and deciding how we would furnish our flat. And at that point we struck a snag so big that it jerked even my fat head down out of the pink clouds and made me pay attention to mundane matters.

Helen's method of giving each of her creations a variegated, unique personality of its own was a secret known only to herself. Naturally she was able to charge high prices for her products. She was making a lot of money quickly, and spending it the same way on every kind of gaiety that Terraport had to offer. I had been keeping pace with her. Now my bank balance was so perilously close to zero that there wasn't enough in it to curtain the windows let alone supply the rest of the furnishings for the beautiful flat that we planned.

THERE was only one way out of it, of course. I had to go to space again, and try to pull off a profitable deal somewhere. Luckily I always make a point of keeping my business account strictly apart from my personal one or I might not have had enough capital even for that.

After thinking it over for a day or two I decided to make a quick trip to Algol Four, trading glass gauds for the perfume-bearing Yerxa weed. The natives of that planet are a bloodthirsty, tricky lot to deal with, so although the round journey can be made in less than a year and the weed obtained cheaply the trade is not too popular with spacemen, and the plant still commands a good price from the scent manufacturers of Earth.

Helen, white-faced, trying bravely not to cry, saw me off at the space-port. "Good-bye, darling," she whispered huskily. "Hurry up back."

I hurried all right. Luckily, this time the natives proved more tractable than usual, and I was lowering my ship into atmosphere again over Terraport in just under nine months.

The first thing I saw after the smoky haze of my landing-rockets drifted away was Helen's figure standing right at the innermost edge of the safety zone round the field. She saw me as soon as I saw her, and began jumping excitedly up and down, waving her handkerchief.

I got my ship into a hangar and my cargo into bond just as quickly as I could manage it, and went over to join her. She looked even more beautiful than she had when I left her.

"Darling," she carolled. "*Darling* ! Oh it's so wonderful to see you back."

Then she grabbed my arm and swept me away, bubbling over with news and endearments and plans about what we would do now that we were together again, until I began to feel slightly dizzy. This was a new Helen, unlike the composed, quietly affectionate girl that I had left behind. I credited the change to our long parting, and concentrated on enjoying it.

We spent the rest of that day together, and the whole of the next day, and the whole of the day after that. And then it happened.

We had been for an evening visit to the stereo-pics, and when we left the theatre we found that it was a beautiful night. A clear, star-heavy purple sky, and over everything an amber wash of moonlight. So we decided to walk

home instead of taking an aero-cab. We'd gone about half a mile, too engrossed in each other to pay much attention to anything else, when suddenly from above us came the violent squawk of a klaxon.

NOW the laws about landing in and around cities are quite specific. Ships weighing more than ten tons—that is all interplanetary and interstellar stuff—may land only in approved fields except in cases of grave emergency. Smaller ships are permitted to land on the city's roads, but when doing so they must observe two rules. They must descend the last thirty feet at not more than three miles an hour, and must give plainly audible warning of their approach all the time they are coming down. Unfortunately, as long as there have been traffic laws there have been fools who will break them.

When I heard that klaxon I looked up, and as a patch of darkness swelled rapidly over us I realised with sudden horror that the idiot who was driving the ship was bringing her down about ten times as fast as he ought to. And at that moment he decided to add to his lunacy by switching on his prow light. The stab of yellow brilliance dazzled me. Helen jumped one way. I jumped the other. And my way was the wrong one.

The prow light expanded swiftly. I could glimpse the metallic shimmer of the ship's body behind it, and hear the hiss of her rockets. I closed my eyes, knowing that in a fraction of a second I would inevitably be burned or crushed. Then a pair of strong hands gripped me firmly by the shoulders, threw me clear of danger. As I landed on my feet again I stumbled, and wondered dazedly who my saviour was.

I recovered my balance enough to be able to look round. In the centre of the cone of light was Helen, her slim legs flashing as she raced out of the way of the descending juggernaut.

She almost made it. Then one of the stubby, decorative wings of the thing caught her in the middle of the body, tossed her into the air, and threw her into the shadows at the roadside.

Sobbing and swearing both at once I darted round the back of the ship to cross over to her. I was running as quickly as my legs would let me, but all the time the sane part of my brain was whispering that there wasn't really any point in hurrying. She was dead. She had to be dead. No creature made of soft flesh and fragile bone could take a jolt like that and survive.

I reached her almost before the ship grounded. And . . . She was standing on her feet, dusting herself down !

I WENT slack-jawed, goggle-eyed, and for a wild moment had thoughts about wish-fulfilment hallucinations. Then my mind recovered its poise, and began to add things up. The extra, almost ethereal beauty that I had noticed about her on my return. The exuberant affection that was so unlike her formal cool self. And now this preternatural strength and toughness.

The fool who had been driving the ship had scrambled out of his cabin by now. Bulky in one of those fancy, padded flying suits he came floundering over to us. He gaped at Helen. "Lord !" he gasped. "Never seen anything like it. She took a throw like that, and she isn't hurt a bit !"

I glared at him. "Why should she be ?" I asked flatly. "Robots don't bleed."

Then I went stalking up the road, with the pseudo-Helen running beside

me, wringing its rubberoid hands and begging huskily with its metal voice-box. "Please don't be angry," it wailed. "Don't leave me. I didn't mean to hurt your feelings. . . ."

If anyone saw us during the next ten minutes they must have put me down as as a hard-hearted brute, to be able to maintain a stony-faced silence while a beautiful woman by my side was begging for forgiveness and weeping broken-heartedly. That is, unless they got close enough to notice that her weeping was purely a matter of facial expression and sound. Helen had forgotten to fit the damned thing with lachrymal glands.

After a while, though, my sense of justice began to revive. After all, a robot can't help being a robot, and the thing *had* saved my life. In the end I let it come home with me as it wanted to.

It didn't take long to find out what had happened to the real Helen. Now that I look back I know that I should have been warned by that mechanical rabbit's making its joke about big, tough spacemen *before* she met me. As I admitted previously there are some bigger and tougher than me around Terraport. One of the biggest and toughest of them all was a racing pilot named Jim Ranger. Helen and he had married just one month before I got back to Earth.

In those days I was still young and naive enough to be broken-hearted by the discovery that women are women and will behave as such. Once I knew definitely that my dreams of love and domesticity were over I grew dramatically desperate. I toyed with the idea of suicide, though deep down inside me I knew all the time that I was doing no more than toy. I just haven't the temperament for that sort of thing. Then I tried drinking heavily, but that didn't work out too well either. Finally I made up my mind to do what a number of other spacemen have done for various reasons, leave the Solar system behind and never come back.

It can be done, you know. A good, modern, hyper-drive ship is so well constructed that it will last more than a man's lifetime without needing anything but minor repairs. And the 'goldfish-bowl' system of balanced ecology in them is so very nearly perfect that one needs only an occasional replenishment of supplies.

ALL this time the replica Helen was hanging around, sad-eyed and wistful, looking so like a genuinely love-lorn woman that even I had difficulty in remembering that it wasn't. Once or twice I thought of destroying it or giving it away to somebody, but somehow I could never quite manage it. In the end I yielded to its entreaties and let it come along with me. If it was good for nothing else, at least it could do the chores.

For a long, long time I pounded the hyper-drive, going from system to system, exploring planets that had hardly seen a man before. There is wonder and bizarre beauty enough in space to fill a thousand lifetimes, and for a year of two I really did manage to fool myself into believing that this way lay satisfaction and eventual forgetfulness.

Then, gradually, I learned that there are needs that no system of balanced ecology can take care of, forces that do not vary inversely with the square of the distance from their point of origin. And the names of two of those forces are homesickness and loneliness.

Obstinacy kept me going for a while. Finally, though, while I was lingering

among the outrageously improbable flame-beings of Orion Five, something inside me seemed to snap. I knew that I must go home or go mad. I returned to my ship, set her into the shortest third order curve that would take me back to Sol, and pushed the motors out to their full power.

There was mingled poignancy and delight in the sight of the green sphere of Earth, and later in the sprawling mass of roofs and towers that is Terraport. For the first day after I landed I wandered among the familiar scenes like a man who has been blind for a long time and has just regained his sight, or has been on a sick-bed, never expecting to get up again, and has suddenly recovered his health. And all the time that I was enjoying myself in that way I knew in my heart that it wasn't really this that I had come back for.

It took me two days to gather together enough courage to decide to visit Helen. Then I found that she and Jim Ranger had left the flat that they had first occupied after their marriage. That wasn't too surprising. I had been away eight years, and plenty of people move in that time. What did make me raise my eyebrows, though, was to learn of the address to which they had gone.

TERRAPORT is a growing, thriving town, and dwelling space is at a premium. Even in the outskirts flats and houses aren't cheap. In the better class districts of the centre they fall into three price groups. The expensive the ridiculously expensive, and those in Westport Environs. Helen and Jim now lived in Westport Environs.

It seems funny to think that after I'd come eight years without turning a hair I should find myself nervous of going the last half a mile. That's how it was, though. The people who live in Westport Environs are apt to regard such plebeian creatures as free-lance spacemen as one of the lower forms of life. Useful, of course, in their way, but completely beyond the pale socially.

In the end, though, I bought myself an entirely new outfit, braced my courage as best I could, hired a taxi, and flew down there.

The door was opened to me by a portly, dignified being dressed in deep black. He was six inches shorter than I was, but somehow he managed to look down his nose at me. I told him my business. He showed me into a heavily furnished room and promised in sepulchral tones to see if madam was at home. As he turned away I chuckled.

"Helen's as good as ever with her stuff, but when she made you she overdid it a little. You're almost too good to be true."

He turned back to me. "Madam has several of her creations in the house, but she keeps them exclusively for the *amusement* of her guests. I am human."

Then he disappeared, and I rather began to wish I could do the same.

Helen came down a few seconds later. I gulped slightly at the sight of her. It was the same old Helen—but more so. Rather too much more so. She offered me the tips of her fingers, and with an effort managed just a slight smile. "Why *hullo* ! So nice to see you after all this time. What *have* you been doing with yourself ?"

She persuaded me into a seat and settled down beside me. The light glistened on her improbably yellow hair. I started to tell her where I had been for the last few years, but my heart wasn't in it. And I had scarcely had time to plough my way through the first few sentences when there came the sound of scuffling footsteps outside.

Helen's face remained unchanged, but her eyes hardened. She got to her

feet abruptly, and left me without a word of explanation. Through the door I could hear her raised voice, and a low murmur answering her.

She returned, and sat down beside me again. "Now what were you going to tell me?"

"I don't think it's of any great interest. I came really to see how you were getting on. No need to ask, though. I can see you've been doing pretty well for yourself."

"Very well," she said, looking round complacently. "Indeed, now that we move in so very much better circles, I wonder at times just how I *did* manage to exist in the former way. Though of course," she added with too-politic haste, "I'm always pleased to see a friend that we knew in our humble beginnings."

"Of course," I said. I tried another tack. "And your husband? How's he doing. Still breaking speed records in rocketry?"

She froze slightly. "It's no longer necessary for my husband to earn money in that way. And in any case his former profession scarcely befits our present station in life. He is retired now, and pursues his hobbies."

"I see."

I STUCK it out for another ten minutes, then I dug out the oldest and feeblest excuse of all—another engagement—and started to make my escape. There was one thing I was determined to do before I left, though. "Look," I said. "I really would like to meet your husband. I don't hold any grudge against him now, you know."

Though her face remained expressionless I could see she wasn't too pleased with the idea. There wasn't really any way she could get out of it, though. "Very well," she said, and turned to lead the way.

We swished up a couple of floors by lift, and then climbed a narrow flight of stairs.

Ranger was working at a bench. I glanced at what he was doing, and something seemed to wrench at my insides. He looked at his wife with startled eyes as she came in, and then smiled feebly at me. I got the impression that he was almost pathetically eager to talk, but that something was holding him back.

Helen told him who I was. He nodded, and gave me a brief smile. When he spoke I knew that it was his voice I had heard answering Helen's outside the door downstairs. "I've heard a lot about you," he said. "Though this is the first time I've had a chance to meet you." He wiped his hand down his trousers, then shook his head over it. "I hope you'll excuse my not shaking hands. The goo makes rather a mess. You do understand, don't you?"

"Yes," I said. "I understand. Everything."

And then I just couldn't stand it any longer. My exit was more abrupt than polite. I went down the stairs two at a time. Helen, keeping pace with me, was breathing heavily by the time we reached the top of the lift shaft.

We didn't say a word to each other until I was standing by the open door of the house. Then she put out a hand to me, and spoke. "There's one thing I must ask before you go. You . . . You don't resent what I did, do you? I mean, making you that robot model of myself. I meant well . . . It was only a girlish fancy, of course, but I had an idea it would soften the blow for you . . ."

I laughed, loudly, and perhaps a little wildly, "Resent it?" I said. "Why, if you only knew it, that was the best turn you ever did me. . ."

And the funny thing was, I meant it.

I SAID once that robots don't bleed. Now I'd found out that there are other things they don't do either. They don't in the course of eight short years put on flesh until they bulge where once they curved. They don't dye their hair until its mustard-coloured sheen is a brazen caricature of the soft gold that you remember. And they don't have new-skin grafted over every wrinkle until their face is about as capable of expression as a rubber mask.

All that's not so important, though. A man grows old along with his woman, and so she stays more or less the same to him. But there are other things that robots don't do. They don't change their old ideas and values and become insufferable snobs just because they are making a lot of money. And, above all, they don't take a man like Jim Ranger—big, tough Jim Ranger, the idol of every teen-aged boy on the planet, the man who could ride anything that blasted its way through space on rockets and hold it in a tighter curve and bring it home seconds ahead of any other pilot in the racing game—they don't take a man like him and because he can't adapt to their fancy new ways utterly break his spirit. Break it until he is turned into the type of creature who will let his wife send him to hide himself because she is entertaining a visitor downstairs, or let her take him away from a game that is his life's blood, and leave him nothing else to do with himself all day but linger up in the attic making—of all things—little toy models of rocket space-ships.

We're in space now, my robot Helen and I. Two light years out from Sol, and going fast. The Universe is a big place, and there are a lot of strange corners in it that I haven't poked around yet. I don't think we'll ever bother to return to Earth again.

THE END

THE LITERARY LINE-UP

"JACK" Chandler returns in the next issue with a fine action story "And All Disastrous Things," a novelette unlike any of his previous stories. John Beynon also returns, this time with "No Place Like Earth" (a sequel to his "Time to Rest" in No. 5), which has been specially written for *New Worlds*. It is just as nostalgic as its predecessor, too.

Three new authors to our pages—John Christopher, Cedric Walker and Peter Hawkins—will bring fresh ideas into the shorter stories, and it is safe to predict that you will ask for more from them in the future.

WITH only four stories in the last issue, story ratings were very close. So close, in fact, that we have the unprecedented fact of three tying for second place!

- | | | | | | |
|----|-----------------------|----|----|----|-------------------|
| 1. | Plagiarist | .. | .. | .. | Peter Phillips |
| | { The Dawn Breaks Red | .. | .. | .. | John Brody |
| 2. | { Martian's Fancy | .. | .. | .. | William F. Temple |
| | { Quest | .. | .. | .. | F. G. Rayer |

More postcards would have split them up. Somebody forgot to cast their votes. It may have been *you*!

BOOK REVIEW

The Conquest of Space. By Willy Ley (text) and Chesley Bonestell (art).
Sidgwick & Jackson Ltd., London. 160 pp. Crown Quarto. 18/-

ONE OF the most important and interesting features of extra-terrestrial flight, when it develops fully, will be the photographing of our Moon and the nearer planets. In fact, more will be learned first-hand by the camera than by many man-made landings upon our satellite or further aspace. Almost certainly the other side of the Moon will be photographed for the first time by a ship (manned or robot controlled), which will circumnavigate it and return to Earth.

Those films and pictures are going to be something to marvel at, especially if they are in colour. Until then we are having to rely upon artists' impressions of the terrain and topography of our nearest neighbours in space.

Not until now, with the advent of *The Conquest of Space*, has a book been published which combines the flawlessness of photography with the wizardry of an artist.

In 58 beautiful illustrations (16 in full colour), artist Chesley Bonestell takes you through the Solar System—to see the Earth from hundreds of miles up; approach the Moon and land; view a dust storm on Venus, the canals of Mars, the seared surface of scorched Mercury; to stand upon the Moons of Saturn and view its rings from the most surprising angles. One painting alone is worth the price of the book—a lunar landing with a spaceship crew setting up their instruments.

(More recently, Bonestell has been responsible for the astronomical accuracy in the scenes of the now-famous film *Destination Moon*.)

MEANWHILE, completely overshadowed by Bonestell's magnificent art work, but nonetheless just as brilliant in its manner, is the text by Willy Ley, author of numerous scientific articles and an already famous book, *Rockets and Space Travel*.

In an introduction, Ley explains the scientific accuracy of Bonestell's work and the amazing amount of knowledge and detail required to build such "real contributions to descriptive astronomy," as R. S. Richardson of the Mount Palomar and Wilson Observatories describes these pictures.

Throughout the text Ley ties in factual data with the paintings, contributing many line drawings himself to illustrate his facts. In the opening chapter he gives a vivid word picture of the take-off made at an actual rocket experiment (probably at White Sands, New Mexico) as seen from the observation shelter. This in itself is as real to the mind as the artist's brushwork.

The two collaborators as a team are invincible, and one realises that this book, in its own way, is as vital a contribution to the development of space flight as the actual experiments themselves.

The Conquest of Space is, without doubt, a preview of the greatest adventure awaiting mankind.

BIGHEAD

By WILLIAM de KOVEN

It was an old problem—a minority with brains and power, against a majority only endowed with numbers—and corruption.

Illustrated by CLOTHIER

ZIRCON looked steadily at his father and there was no fear in his bold blue eyes. Strength rippled negligently under his golden skin as he twisted the lethal toy in his hands.

"Because I love her, father," he said. "Because I love her more than anything else in the world."

Pluton the Bald sighed. Such things had happened before, but always to the sons of other men, and he had known how to deal with them efficiently, dispassionately. The gas chamber . . . the electrified rail of a staircase . . . the carefully defective motor of an atomic man-propeller. But Zircon was his son. Patiently, he set himself to explain:

"What you would do, Zircon, harks perilously back to the middle years of the Twentieth Century, when civilisation all but destroyed itself in the first discovery of atomic power."

"I know. I know, father," said Zircon impatiently, "I have read my history."

"Apparently without any understanding of its meaning or you never would propose a liaison with a Pinhead woman—No, you must listen!—Out of the chaos that was the world there emerged a little group of men, men of intelligence and determination. They took control of Terra and the colonies on Luna, Mars and Venus."

"And the basis of that control," said Zircon, "was that only those with large skulls could have the brain capacity to be completely aware men. Therefore those with small heads were weeded out, denied any place of influence or power."

"That is right," said his father. "And so—"

"And so," continued Zircon, "you would forbid me to marry Threnda, just because her head is small."

"At her age," said Pluton, "her cranial index should be 301. It should show signs of growth with knowledge and understanding. Your head and mine have grown eight points each year since we were 16 years old. Those whose brain capacities do not grow are obviously not those from whom the rulers of the world should come."

"It has always seemed to me," said the younger man, "that determination, application and ambition were as important as mere intelligence."

"The Supreme Council does not agree with you."

Zircon arose. "And suppose I don't care," he said. "Suppose I marry her



anyhow. Suppose I go to the Pinheads and lead them, try to improve their lot."

"It would be unwise."

"Unwise but a grand adventure," said Zircon. "The Pinheads are our slaves to-day. Under my leadership—"

"I refuse to allow it. I forbid it!"

Zircon spun the toy in his fingers. "Don't try to stop me, father," he said. "I want Threnda so badly that I might forget myself." He moved rapidly and was at the window. "Good-bye, dad," he said. "You play fair and I'll play fair."

On the fire-scarred balcony he straightened his knees, clasped hands across his chest. Two brief atomic bursts at his feet shied him into the air. The plastic web from elbow to ankle guided him in a swooping turn. Two more atomic bursts and he was gone.

Pluton touched a button and the great head of Nestos, chief of the Terran Secret Police, smiled at him from a radiant screen.

"Yes, sir?"

"My boy has gone to get his Pinhead girl. Let him have her for a little while. After all, he is young and a fling won't hurt him. Then..."

Nestos smiled. "I understand, chief."

THE CRUSADE of Stephen Blakeney after the Third World War had
BIGHEAD

seemed the only thing to do at the time. The first half of the Twentieth Century had seen a regrettable political movement, only incidentally related to democracy but apparently part of it. It was the upward surge of Pride in Ignorance. The uncultured, the ignorant, the unimaginative had suddenly discovered that the instruments of democracy gave them, by their mere numbers, power to rule the world. They had proceeded to do it.

The result was called the Brooklyn Movement. Little by little, big enterprises had been sucked in by State or municipality. Thereafter mob control saw to it that any man with brains was forgotten in promotion. This was an extension of an earlier tendency. Little men have always feared men with brains, for men with brains have a tendency to rise to the top. Soon the posts of control went automatically to the roughnecks who jeered at the use of a long word or the expression of an abstract idea.

Men with brains and imagination had become a reviled and down-trodden class. With almost every enterprise in governmental hands, politics and seniority took the place of brains and ability. Occasionally some worker of the Bigheads perfected a new device. It was regularly stolen from him, for Bigheads, despite the letter of the law, had no enforceable rights in the Pinhead courts.

Ten years after the Third World War Stephen Blakeney was ready to proceed. Acting the part of a roughneck, Blakeney had wormed his way to an important position in the Census Bureau. In 1980 he was ready to have certain tests made universally. These were based fundamentally on the thesis that, if your skull hasn't room for adequate brains, you can't have adequate brains. In his book, "Bighead Revolution," published by Arkham House in 2003, he admitted that a bigheaded youth might be a screwball, completely unbalanced and irresponsible, but asserted that, at the start, he had had to use what testing tools he had at hand. "I had to go by hat-size and age," he wrote. "Unfortunately, this eliminated those whose heads were tall but small in circumference. After Bighead control was absolute, we were able to measure more accurately in terms of cranial capacity, setting the indices 294 for age 20, and 364 for age 30 up to 634 for age 60. Those who didn't conform to within 10 per cent. were driven out of the Bighead community at first. Later, we were obliged to liquidate our rejects, for some caused trouble. We based our society on the idea that brains should be used. When brains aren't used, heads don't grow."

SUCH INDICES, as has since been demonstrated, did not guarantee geniuses but they did produce for Blakeney a minimum standard of intelligence. Those with smaller skull cavities, he felt, almost certainly belonged among the roughnecks, for although chance might have given them education, nature had not equipped them to put education to productive use.

Blakeney used other tests. Any man, no matter how large his cranium, who could not hold his liquor, was immediately stricken from the Bighead rolls on the principle that his lack of capacity signalled a weak grasp of will over intelligence, a basic childishness which negated mere brain power. Then, a dozen unanswerable questions about man's place in the universe—about life and death and fate—were posed. Those who were too sure of the answers were set down in Blakeney's book as incompletely aware persons.

In the end, out of the 1,500,000,000 persons remaining in the world after

the Third World War, Blakeney had about 100,000 who fulfilled the conditions of his first crude tests. With these he proceeded to take control of the world.

From this distance—300 years—world conquest does not seem to have been especially difficult. It took twenty years. The first step was what used to be called military intelligence—to learn what and whom to seize. The second was infiltration—to work loyal Bigheads into positions for seizing power.

ON JANUARY 2, 1998, the world awoke to find Bigheads in control of all the sources and armouries of atomic power. There was some trouble. Kansas City—last metropolis on the North American continent—and Budapest had to be wiped out. After that the Pinheads came quickly to heel, for the Bigheads were everywhere, working in the dark. They could not easily be found or fought.

Blakeney's idea was that those with brains and imagination should never stultify themselves by taking on the stifling tasks of open administration. Rather, they should be supervisors, the ultimate authorities to whom the less-gifted ostensible officials should appeal. The case of Argentina illustrates this.

That was in 2032. The Bighead Council for South America decided that Argentine costs of government were too far above the norm, that the bureaucracy should be slashed by 60 per cent. Schmidt, the president-dictator of the country, objected. He drew much of his political power from those office-holders. The Bighead Council was patient. It gave him 30 days. At the end of that time Schmidt and his entire cabinet disappeared. The people, by due democratic process, were allowed to elect his successor. But this man also proved stubborn, as did the next and the next! Finally, after the sixth general election in seven months, a president-dictator and cabinet took power who were willing to do what was best for the people.

THERE WERE mistakes, of course. The Slavic Bighead Council should never have attempted to legislate the scientist Galakin out of activity. It should, instead, have used his great power. Then the Dardanelles would not suddenly have been blocked and all the Ukraine wiped out by floods.

But those who made the mistakes were never visible to the public, which continued to blame the straw men the Bigheads permitted them to elect. Accordingly, government followed government, conditions grew steadily better. Any ruler who even dreamed of hostilities was liquidated so promptly that war lost its prestige as an instrument of international policy.

Blakeney had planned cleverly to keep the Bigheads uncorrupted and incorruptible. There were never many of them—seldom more than 150,000, for the tests grew more exact and stringent with the years—and the royalties from Bighead inventions were paid to the group rather than to the inventor. No Bighead ever wanted for material comfort. The composition of the group—with intelligence and social balance demanded by all tests—almost precluded a greed for power, but Blakeney affixed the triple locks of assurance by rotating office-holding. Even the Founder was a Supreme Councillor for but three years, Moderator of the Supreme Council for but one.

In the year of which I write Pluton was Moderator.

WHEN ATOMIC bombs destroyed New York in the Third World War
BIGHEAD

they closed the mouths of the North and East Rivers and sent the waters through a greatly enlarged Harlem River into Long Island Sound. A new city therefore grew up on the ruins of New Rochelle and became the principal port for the eastern seaboard of North America. It was far from as big as its predecessor—people still eschewed cramped dwellings in foreordained atomic bomb targets—but it was the biggest of the country's remaining cities. Largely devoted to freight handling and communications, it was ostensibly ruled by Marcus Green. Green was a strong man, the most notable Pinhead in the East. He had built a single idea into a great transportation and political empire, on Bighead sufferance. He would probably become the next puppet president of North America. He had a daughter named Threnda and with Threnda Zircon was in love.

The young man passed rapidly over what had been Philadephia, now a cluster of pleasant homes along its former western rim, and sped across New Jersey, where most of the battles in the first great war for democracy had been fought. Democracy existed to-day only in shadow but the old names still reminded of it: Trenton, Princeton, New Brunswick, Elizabeth, Newark, Fort Lee. Zircon flicked across them in the warm dusk, his eyes on the horizon glow that marked New Rochelle.

Threnda would be waiting.

Let Pluton rage. Surely he would do nothing serious to his own son.

Zircon was too young and understood his history too carelessly to realise how jealously the Bigheads had been forced to defend their benevolent empire.

No, no, thought Zircon, surely Pluton would not . . .

He cut off the tiny atomic motors in his heels with a twist of the dial on his chest. Bending his elbows, he spilled wind from the plastic wings and dived down to the Marcus Green farm on the city's northern shoreline. Beneath him he could see the regular ranks of rocket ships. Here were the giants that went spitting off to Europe and Asia and South America at ten-minute intervals. Here were the Martian ore ships, the slim giants which brought medicinal mold from the sweating swamps of Venus. Some day, he and Threnda . . .

ZIRCON'S wings caught air once more and he soared like a hawk, turned back from a series of stalls to break his speed and came in to a running landing on the Green front lawn.

Marcus came to meet him, red face beaming, broad hand outstretched. "And what have you decided, my boy?"

"I told Dad to go to hell. I'm going to marry Threnda."

"Grand, grand!" The big man's palm on Zircon's back was comforting with its sense of controlled power. "That will be a wedding to remember!" He raised his bull's voice: "Threnda! Threnda! Your boy's all right! He's decided the right way!"

Threnda stood in the doorway and Zircon for the hundredth time felt every fibre of his being thrill to the sight of her. Small, beautifully formed, her tiny head sat on the slim column of her neck with a dignity and grace which approached majesty. She ran to his arms.

"Is it true, Zircon?"

"Yes, darling. From now on my lot is cast with you and your people. What little I know of Bighead civilisation will be given to you all."

She snuggled into his arms. Sacrifice? Why should Pluton talk of sacrifice of his Bighead birthright? This was worth it!

Marcus led the way indoors and introduced Dennis O'Leary.

"My right hand man," he said. "Handles my political interests and most of my relations with the Bigheads. Good fellow for you to know. If you're going to live and work with us, he can help."

O'Leary's eyes were cold in appraisal and Zircon felt a momentary qualm of fear. Then O'Leary's face creased in a genial smile. He shook hands.

"Always glad to help," he said cordially. "For a moment I had my doubts. Thought you might be a spy of the Bigheads."

"Don't worry, Dennis," said Marcus. "I'll vouch for him."

"But why should the Bigheads need a spy—here of all places?" asked Zircon. "Surely Marcus is thoroughly trusted."

"Things are moving, my boy," said Dennis. "So far we've been lucky in keeping out of Nestos' way..." He broke off sharply, as if he had received a sudden signal. "Here, here! Where are my manners? I've forgotten to introduce Melissa."

THE GIRL who came forward was dark and carved by a generous sculptor. Her close-fitting tunic and skirt of stainless steel mesh adorned one of the most beautiful figures Zircon had ever seen. Her handclasp was as straightforward as the gaze of her wide blue eyes. "I'm Mr. O'Leary's secretary," she said. "You don't have to have any secrets in front of me."

Zircon grinned. He liked her. "I hope they never will be necessary," he said.

"There are one or two things, Zircon," said O'Leary, "on which we'd like your help. For example, there's the matter of the warhead. . ."

Once again he dried up and Zircon sensed that Marcus had thrown a sharp glance from behind his back.

"This is no time for such discussions," said Green. "Tonight we plan the grandest wedding New Rochelle has ever seen. To-night we celebrate a treaty of alliance between the most promising of Bighead youths and the most beautiful of Pinhead girls. Come in, come in! Let's have a drink on it!"

THE WEDDING was all that Marcus had promised, a huge, boring affair which seemed likely never to end.

The honeymoon was better. Threnda was lovely. They went to an out-of-the-way forest retreat on the lake which used to be Hartford, then on to a wild, wooded hill—Beacon Hill—in what had once been Boston. Day after magic June day drifted by. They had found a grove of trees hundreds of years old—perhaps going all the way back to the destruction of the old Massachusetts capital in 1965. Between the great trees was a bed of perfect moss. There they forgot time and let the golden hours glide by.

At the end of the grove, the view, unmarred by smoke or any other sign of human habitation, swept off to the faint blue reaches of the bay. Sun and wind and the lassitude of satisfied passion made it a perfect moment.

But Nestos struck.

Down the hill, 300 yards away, Threnda was picking buttercups. The afternoon sun glinted from her golden hair, found fascinating highlights

along arms and breasts and thighs. Somewhere a hermit thrush was pouring out his silver soul—but through that song Zircon heard the first mutter of approaching doom.

He was on his feet at once but still could not believe what he had heard. That mutter in the sky ! The ray ship ? No ! Pluton would never. . .

Then he was running, stumbling down the hill, shouting warnings to his bride.

Sweeping in over the far side of the bay came the ray ship, incredibly swift, incredibly deadly. Zircon knew that automatic direction finders, tuned to Threnda's own personality, dragged it unerringly to its target. Even though its pilot were killed, half its controls shot away, it still would reach its target, unless. . .

"Take off your clothes !" he screamed. "Everything ! Quick !"

Another woman might have dallied with bantering argument, might have been coy. Not Threnda. Her unquestioning faith in this new husband of hers saved her. In three quick movements the gold cloth lay about her feet and she faced him, smiling.

She did not see the ray ship. It looped down toward her, sagging below its former line of site. Gone was its sure control, for personality tuning—those little punched metal cards on which the Bigheads cross-indexed every adult in the world—depended on clothes. Clothes are part of the personality. Without them we are not the same. The magnetic emanations of an industrialist at a board meeting are not those of the same man in a bath-tub.

The ray ship sagged. It touched ground and exploded. A greasy column of smoke rose from where the Parker House once had been.

Zircon held his trembling little wife in his arms. "This," he said, "is a declaration of war !"

THERE was no doubt in his mind. Only Nestos controlled ray ships. And had the ship not been tuned to Threnda's personality, the change in it would not have dropped it from its course and destroyed it. Nestos had moved and Nestos would not have moved without orders from Pluton. Therefore, it was war—the first war on Terra in more than 300 years.

To avoid tracing by ray personality finders, he and Threnda flew back to New Rochelle that night, stark naked. Marcus Green's eyes widened as they came in from the lawn.

"Is this why I pay for a trousseau ?" he asked.

Zircon brushed his pleasantries aside.

"To-day my father declared war," he said. "To-day he tried to kill Threnda. Henceforth, count me on your side, for this is an abuse of power and I mean to take it away from him."

Green's eyes lighted. "Great !" he said. "We must call a council."

There was scorn in Zircon's voice. "A council here, where a ray-finder can spot us and an atomic bomb end us all ? Be sensible. We must have a spot which we can defend."

"Then we must go to Mars," said Marcus. "They won't look for us there. Even if they did, the uranium emanations would make their ray-finders useless. An empty ore ship is leaving to-night. I'll have the boys on board."

THE SPACE-FREIGHTER *Maggie Donavin* spat her way out of the

Earth's atmosphere at 0231 on 27 August, 2307. Passing close to the Lunar Observatory, which gave her the five azimuths for her rolling recorders, she made the corrections needed on her robot pilot and then slipped off at a constant acceleration of two gravities. For one week she would fly herself. Then, as an automatic tell-tale flipped over, she would have to be switched to automatic deceleration at the same rate. In a little more than 12 days she would arrive, her speed tuned to the orbital rate of Mars.

As ray personality detectors were ordinarily operative up to a range of one light minute, nobody aboard the *Maggie Donavin* wore any clothes. Green had called the most powerful leaders of the Pinheads and these men had brought along their secretaries, invariably personable young females. Green introduced Heckel, leader of the European Federation; Hamada of the Asiatic Bloc; Robinson of Africa and Mendez of South America. They were all curiously alike, a little beefy, a little too hearty, men who had made their ways by force of will and personality in a world dominated by Bighead influence. Their secretaries were also much alike, leggy, bosomy blondes with knowing eyes. Of the women aboard, only Threnda and Melissa had individual personalities.

"So far as the Lunar Observatory knows," said Green, "there's nobody aboard the *Maggie Donavin* but her crew. The snoops will have nothing to try on their damned personality index cards."

Zircon corrected him. "There you're wrong," he said. "Something will show but it will not fit the index numbers."

"Naturally, the old index cards—which allow for temporary variations up to perhaps 10 per cent. in some cases—would do no good. That is, they would not identify me. But the detectors would show that certain persons are aboard this space-freighter for whom there are no index cards on file. That information will be flashed to Nestos. He will not know that Threnda and I are involved but he will investigate, for it is his business to solve mysteries such as that. Especially at this time, when he must realise that war has been declared between us, he will set his detectives to work to track down any possible clue to our whereabouts. Remember, since the attack on Beacon Hill to-day his personality detectors have been combing the world and have produced nothing."

"Don't worry, my boy," said O'Leary. "The *Maggie Donavin* is the pride of the Big Green Fleet. With the start we now have, there isn't anything in the Bighead space navy that can catch her. When we reach Mars we'll be quite safe from detection."

The captain of the freighter came in, anxiety in his eyes. "There's something on the metallic detector screen," he said.

Green's voice was sharp. "What does it look like?"

"Like a Bighead patrol ship, on a course to intercept us four days out."

Green and O'Leary turned to Zircon, speaking with one voice. "What do we do now?" they asked.

IN A sybaritic underground palace which had once been part of the Canal Street subway station in New York City, Pluton the Bald called the Supreme Council to order. One by one they answered to their names.

To-day they were grave, for Pluton had posed his problem.

Molonov shook his great head wearily. "If it were any other than your

son," he said, "the task of defending Bighead supremacy would not be so great. He knows our weaknesses. He knows how thin our strength is spread. In Urga only last month I discussed with him the yawning gaps in our intelligence system. We know far less than we should, though we fortunately give the impression of omniscience."

"Let's get down to the problem at hand," said Smith. "Because we have grown careless, because the Bighead administration has bogged down in bureaucracy and red tape—like all the bureaucracies which preceded it in the history of the world—because we are ruled by a batch of time-servers whose motto is: 'Don't Stick Your Neck Out,' who have no energy or enthusiasm—"

"Get to the point," snapped Streng.

"I am at the point," said Smith. "This outbreak is only a symptom of a thoroughly rotten system. We've taken away incentive: we're taken away the joy of achievement for its own sake. We have nothing left save an inefficient police force and the spurious mystery with which we have surrounded ourselves. I say that we need reform and need it damned quick. If we don't get it—"

PLUTON broke in. "Our problem is that Nestos has allowed to escape a young man who knows all our weaknesses, who can locate all our hidden headquarters and strongholds, who can teach the Pinheads every secret we possess. In one year, if he chooses to do so, by using the infinite manpower resources of the Pinheads, he can literally wipe us from the Earth."

"Unless we can find him and destroy him first," said Boreal.

"This is war," said Cameon.

Smith rapped distracted knuckles on the table. "If it is war," he said, "we are finished. We are unprepared. It has been pleasant to tell ourselves of our world-wide organisation, of our smoothly-functioning branches on Luna, Mars and Venus, of our limitless power. But where is that power? Can we *do* anything? Can we *make* anything? Easy living has sapped the Bighead will to produce. Creative thinking is almost unknown among us. Virtually all we have is the atomic bomb—invented in 1945—and the personality detector—invented by a Pinhead in 2170. To-day we actually make neither, save a few secret parts. They are farmed out piecemeal to Pinhead factories."

"Still," objected Cameon, "the world has progressed."

Pluton pressed a bell on the podium. "I shall call Nestos," he said.

Nestos was calmly confident. "My operatives are working on the case," he said. "I believe that I have succeeded in planting at least one of them with the rebel party. There has been no report from this operative for four days."

"That might mean the death of the operative," said Smith.

"But is far more likely to mean that a report could not be sent because the rebels were travelling," said Nestos. "Four days ago the space-freighter *Maggie Donavin* cleared the Lunar Observatory for Mars. Personality detectors revealed the presence on board of fourteen persons for whom we had no index cards."

"How could that be?" asked Cameon.

"The personality index," said Nestos, "can be altered by removing all or part of the clothing or placing oneself in a usually embarrassing position in the presence of members of the opposite sex. When we heard of fourteen unknowns, we immediately dispatched the space-cruiser *Jocko Norris* to

intercept the *Maggie Donavin* and report. The *Maggie Donavin*, so far as we know, is not armed. There should be no trouble." He glanced at his watch. "Lunar Observatory was in constant touch with the *Jocko Norris*. The spaceships were due to meet a few moments ago. Something should be coming in now."

"Good," said Pluton. "We shall wait." He touched a button and a radiant screen flashed on. "Send us the *Jocko Norris* report as soon as you get it," he said.

"It's in," said a horrified voice. "Luna has just reported that the *Jocko Norris* exploded in mid-space with all hands on board!"

"What happened to the *Maggie Donavin*?"

"She went on her way as if nothing were wrong."

Pluton flicked off the radiant screen. "It's war, gentlemen," he said. "Chryso, mobilise the space-fleet and prepare to advance on Mars. We must wipe out these murderers even if it means the destruction of every living soul on the planet."

"It shall be done immediately," said Chryso. The Supreme Councillors rose but Pluton still sat above them, his massive head bowed. They nodded to each other, filed silently out.

ZIRCON'S shoulders still stung from the hearty smacks of congratulation of his shipmates.

"It was nothing," he said. "Sigma-Delta rays such as those which armed the *Jocko Norris* are virtually solids, with directionally-controlled neutrons moving in them. I reversed the direction of the neutrons when the *Jocko Norris* fired on us. They returned down the beam and naturally caused an explosion. It was nothing but an adaptation of the MacPherson defence against the atomic bomb, first invented back in 2235."

"Just the same, it was new to us," said Green. He slipped an arm about Zircon's shoulders. "Boy, it's really good to have you with us. Our whole plot could have gone up in a puff of smoke without you."

Eight days later the space-freighter *Maggie Donavin* signalled the Mars spaceport and learned that the Quanto Uranium Mine slip was clear.

"But we shan't go there," said Green. "There's a little mine 600 miles beyond. As we pass Quanto we'll cut our exhaust impulses and they'll think we've stopped there. Actually, we'll be gliding on in to Krypto but the spotters won't be able to pick us up."

The freighter made the Krypto Mine just as the sun began to slide behind the raw red mountains. Swaddled in electrically-heated suits though they were, the awful chill of the Martian night cut through to the bone. Green hustled them through the airlock and into the mine elevator. It began to fall.

"We go down four miles," said Green. "There are some internal fires left in the planet and we take advantage of them."

After a two minute fall the car decelerated not unpleasantly. A Martian ground-ape opened the door of the cage and greeted them in surprisingly cultured language. Another, rather obviously a female, brought a tray of spiced *oinos*, a Martian drink of the upper atmosphere.

Softly lighted, the luxurious apartments were appointed with every comfort that Terra could boast. Zircon sank down into a deep-upholstered chair.

"Wonderful!" he said. "I had no idea that such a place existed on Mars."

Green lighted a cigar made of the rare Venusian *tong-weed*—ordinarily reserved on Terra to writers and artists, because it magnifies the imagination.

He sighed. "But come, my boy. Here we are, protected by four miles of uranium ore from any attempt to spy on us. I want to show you what preparations we have made for the revolt."

HE LED the way down a soft-carpeted corridor walled and ceilinged with some soft metal, threw open the double doors at the end.

"But this is magic!" exclaimed Zircon. Before him ranged 500 spaceships. Snuggled under the nose of each was a late-pattern atomic bomb, apparently complete.

"Not magic." It was O'Leary's voice. "We've simply been getting ready. It must have been clear to you that conditions on Terra had become intolerable. Bigheads had all the power they needed but nothing they wanted to do with it. They were going nowhere and were bored. Pinheads found all their ambitions running smack into the dead end of Bighead fear and conservatism. For a long time we've been wanting to do something about it. This space fleet is the start."

"And yet you did nothing? You left the fleet here on Mars?"

"We did nothing because we were powerless. In the first place, those atomic bombs are not complete. We have assembled all the parts made in Pinhead factories but the result will not work. A space of about one cubic inch in the warhead of each is vacant."

"I know," said Zircon. "We call it the core. It is really amazingly simple if you know its secret."

"Can you make it?"

"Naturally."

There was a deep sigh of relief from the Pinhead leaders clustered about him.

"Then," continued O'Leary, "there is the question of what to hit. Armouries of Bighead strength are craftily hidden away all over the world. We must have them exactly spotted on our maps."

"Of course," said Zircon. "I can do that, too."

O'Leary slapped him on the back. "Then we're set to go!"

"It will take some time," said Zircon. "I must have a modern machine-shop and the proper tools."

"They are here," said O'Leary, "as well as trained assistants." His tone was almost too eager.

"I prefer to work alone," said Zircon. "Then I can be sure of the results."

"And after that you'll mark the maps for our pilots?"

"Of course, if it is necessary," said Zircon.

"Boy! Get going!" said O'Leary. "The sooner we wipe out every lousy Bighead the better it'll be for all of us!"

ZIRCON turned slowly to face the big man. "Surely that isn't what you intend," he protested. "It won't be necessary to smash them all. A simple revelation that we have the power to do it will be enough to bring a compromise along the lines we all want."

There was a silence.

"Don't you agree with me?" insisted Zircon.

Green cleared his throat.

"Of course, my boy ! Of course ! Dennis is simply a little too enthusiastic, now that we see victory right ahead. Naturally we want only what you want. Even if we didn't, we'd be guided by your wishes."

The other Pinhead leaders nodded solemnly. "Of course ! We owe you too much to wish it otherwise."

Zircon still hesitated, but Threnda slipped a warm arm about his waist. "Come, darling ! I'll show you the machine shop. It's all clean and new and beautiful. Even the lead plates which sheathe it against the uranium emanations are still bright and shining." She kissed him and he let her lead him away.

THE NEXT ten days were busy ones, for in them Zircon made 500 cores for the atomic bombs which awaited them. The core, as readers of the present day may have forgotten, was at the same time an activating device and a checkmate to neutron-reversing atomic bomb defences. It forced the neutrons to travel in spirals, horizontal to the line of the bomb's fall, and so wiped out any attempt to reverse their direction and bring about premature detonations. Simple in concept and apparently crude in design, its success depended on measurements to a tolerance of 1/93,000 inch.

Zircon worked hard. The long hours ran into sixteen-hour days, broken only by short visits from Threnda and Melissa. The girls came in now and again with food and refreshing drinks, always bright, always encouraging.

"Don't worry," said Melissa one day. "They're going to do what you want. They'll bomb a few Bighead armouries to demonstrate their power. Then they'll negotiate, as you suggest. In spite of the influence of Green and O'Leary, you'll be the real boss of the new world."

"I don't want to be boss," said Zircon. "All I want is a world in which people may do things—even things like this—and get pleasure merely from the doing. We've been static too long."

Threnda came in with a *moue* on her lovely face. "They're fighting again," she said. "They're trying to divide up the trade and influence of the new world you're going to make for them and they're not having much luck. Oh, hurry, hurry, hurry, darling ! Get finished and tell them what to do. They'll listen to you !" She held up her little face to be kissed. "Are you nearly done ?"

"I'm checking the last twenty-five."

"Good !" She linked her arm through Melissa's. "We'll go tell Dennis. He'll want to get to work on the maps right away."

"What's the hurry ?" asked Zircon.

"Oh ! Didn't anyone tell you ?" Threnda stopped, hesitation, almost fright, on her face.

"Tell me what ?"

Threnda did not answer.

"Tell me what, dear ?"

Melissa broke in. "I think it's all right to tell him, Threnda. Dennis didn't want to interrupt him or he'd have known before this."

Zircon laid down his tools and faced the two women. "Will somebody tell me what this is all about ?"

"It's only," said Threnda, "that the Bighead space-fleet has been mobilised

and apparently the Supreme Council knows where we are, for the first squadrons left for Mars five days ago."

"That means . . ." said Zircon.

"That means," said Melissa, "that you haven't more than a week in which to complete your work."

IN THE control room of the space-battleship *Larry Booher* Pluton paced back and forth, restlessly, endlessly. Nestos tried to calm him.

"Don't worry, sir," he said. "My operative is sure to report in a day or so."

"What do you know? What do you actually know?"

Nestos shook his big grey head slowly. "Mighty little. We've checked all arrivals and departures at the Mars Spaceport, all the ships which reported in, all the ships which were shown on the metallic detector screens. There were no gaps. Every ship shown approaching Mars actually reached Mars. The *Maggie Donavin* asked for a slip at the Quanto Mine. The recording tapes are on file. They reveal that power was shut off at approximately the right time—but the *Maggie Donavin* never arrived at the Quanto Mine."

"You've told me all that. What could have happened to her?"

"The recorders work on exhaust impulses. The skipper probably shut off her power and then let her drift."

"How far could she drift?"

"At her recorded speed and her approximate height, she would have had a glide ratio of 40 to 1."

"How high was she when she shut off power?"

"We're not sure. Probably not more than 17 miles."

Pluton grabbed a globe of Mars, spun a pair of dividers over its surface. "Then we know that the *Maggie Donavin* and her crew are holed up within 680 miles of this point."

"Right, sir."

"What's in this circle?"

"Little enough, sir. Mostly mines—some operative, some abandoned. There's only one town, Knappville."

"I know! I know!" said Pluton impatiently. "You've checked the operating mines? You're sure that the *Maggie Donavin* reached none of them?"

"Absolutely sure. Our agents are positive."

"What about the seemingly abandoned mines?"

"Agents have been checking them one by one. So far they have eliminated 300 or perhaps a few more. They have worked their way to the northern fringe of the area in which the *Maggie Donavin* might have landed."

"Where are we headed now?"

"To that northern fringe, sir. The fleet will augment the patrol ships and end our uncertainty."

"GOOD." Pluton resumed his pacing. If only Zircon would listen to reason. . . But he was hot-headed, like his mother. A good mind but not enough balance. Never had been tried. That was the trouble. Perhaps Smith was right about Bighead civilisation. Not enough crises for the average man. He never got conditioned to them. Couldn't tell how a modern Bighead would react in a pinch.

Smith came into the control room.

"Have you seen this, sir?"

"What is it?"

"An ultimatum from Green, just received by our radio man."

Pluton took the slip of yellow paper and read:

TO PLUTON AND OTHER MEMBERS OF THE SUPREME COUNCIL NOW APPROACHING MARS:

THIS IS AN ULTIMATUM. WE PINHEADS UNDER OUR NEW LEADER NOW HAVE ATOMIC POWER. WE HAVE THE SECRET OF THE ATOMIC BOMB WITH ROTATING CORE. WE KNOW WHERE YOUR HEADQUARTERS AND YOUR ARMOURIES LIE. UNLESS YOU ORDER THE RETURN OF YOUR FLEET—ALL SAVE ONE SHIP TO BRING YOU TO US—AND AGREE TO SHARE EQUALLY WITH US CONTROL OF THE TERRAN EMPIRE, ALL YOUR WORKS OF THE PAST THREE HUNDRED YEARS WILL BE ERASED. YOU HAVE THREE HOURS IN WHICH TO REPLY. CONSIDER YOUR ANSWER WELL, FOR ON IT DEPENDS THE FUTURE OF HUMAN CIVILISATION. WE SHALL EXPECT YOUR REPLY ON 23.078 MEGACYCLES AT 1515 NEW ROCHELLE MEAN TIME. ZUTZUT GREEN, O'LEARY AND COMMITTEE.

"Let me see that message," said Nestos. "There! I told you!"

"Told us what?" asked Pluton.

"My operative has managed to get in with the plotters—actually sent that message. You see!"

Their eyes followed his finger to the word: Zutzut.

ZIRCON entered the committee meeting with a bundle of maps under his arm.

"Are they finished?" asked O'Leary eagerly.

"All finished," said Zircon. He patted them and grinned. "If you really were going to bomb with them you could wipe out every Bighead stronghold and armoury. Of course, you wouldn't get all the Bigheads. They are scattered everywhere as observers—mostly disguised—but you would get all the present leaders."

"That's one thing that stopped us years ago," said Green. "You can't always tell a Bighead when you see him. Some of those with the largest skulls are classed as Pinheads because their ancestors always wore the same size of hat—"

"Or lost control of themselves after a few drinks," said O'Leary. "But come, my boy! Let's see the maps, so that we can get going."

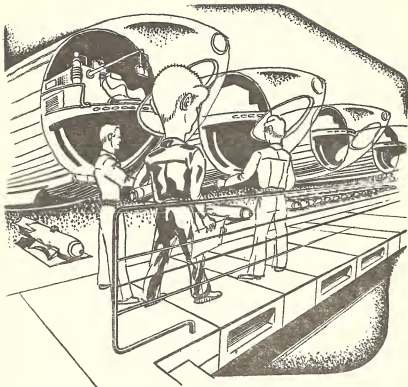
"In good time," said Zircon. "There are one or two points to discuss first. I want to make sure that we're all in perfect agreement about how to proceed."

"Oh, but we are!" protested Green. "You saw the ultimatum. You almost dictated it. Surely our good faith must be evident by now."

"I'm not certain," said Zircon. He glanced around the table, at Green, at O'Leary, Heckel, Hamada, Robinson and Mendez. Their returning stares were curiously intent—all save that of Mendez, who could not meet his eyes. He turned aside, made some joking remark to his secretary which Zircon did not catch.

"If that's the case, all is well," he said, "but now is the time to be certain.

BIGHEAD



More than once I have felt reticences among you. O'Leary has started to tell me things and then has maundered off into a change of subject. Either his mind is weak or he is a mighty poor liar."

"Oh, come, now!" said O'Leary. He forced a laugh into his steely eyes. "Surely my good friend—"

"Perhaps I'm wrong," said Zircon. "I hope I am. Even the girls—Threnda and Melissa—have given me the same impression. More than once they have started to tell me things which they assumed I knew already, only to be terrified when they discovered my ignorance."

"SO MY MIND is not at rest. I sense plotting going on all about me, plotting in which I am not invited to share. So I ask you gentlemen now, before I deliver the maps, just what it is you intend to do with the world and its colonies."

Green forced a laugh into his throat. "I'm sure you realise, my boy, that there are certain details which have to be worked out. We are in perfect agreement with you on the major outlines of the scheme—"

"I don't want vague generalities," said Zircon. "You've given me plenty of them before. Tell me some of these details of yours. Let me judge for myself how they fit into the pattern of the whole."

"Well, for instance," stalled Green. He waved his hands. "Heckel knows

more about them than I do. He's the expert on finance, for example. Come on, Waldo, tell Zircon what we have agreed."

O'Leary suddenly exploded. "The hell with all this! Why not tell him the truth? It's too late for him to do anything about it now."

Zircon smiled. "Too late?"

"Of course it's too late. We've got the bomb cores and if you think you're ever going to get out of here with those maps you're crazier than I think you are." O'Leary rose. "I say we tell him now. If he wants to go along with us when he finds out what this is all about, OK. If he kicks over the traces, OK, too. We can get rid of him. But I'm sick and tired of watching my mouth and pretending we're a bunch of holy boys who wouldn't hurt a fly."

"That's right, O'Leary. Let him have it," said Hamada. There was a chorus of agreement around the table.

Zircon's eyes vaulted the room to his wife. "Were you in this, too?" he asked.

She ran to him. "Oh, Zircon! Listen! It will all work out for the best."

He pushed her away, gently but firmly. "You go sit down, I want to hear what they have to say before I make up my mind—even about you." As O'Leary began to talk he was conscious of Melissa's eyes on him, questioningly, calculatingly.

"It's all very simple," said O'Leary. "We Pinheads are fed up with Bighead domination, so we're going to end it, once and for all. Our fleet of 500 ships is taking off to-day. They'll run at four gravities. We've got trained crews, the best of the commercial space transport service. The Bigheads can't touch them. Six days from now they'll unload their atomic bombs over all those places you've so kindly marked on the maps. There won't be anything left for the Bigheads except that fleet banging around between Terra and Mars. With its bases knocked out, it will soon come to terms."

Zircon laughed. "Your ships are bombers only, not fighters. They have no Sigma-Delta ray projectors. The Bighead fleet can cut them all off."

"Not now," said O'Leary. "Mars lies between us. If the bombers start in an hour or so they can get away. In going, they can destroy the Mars Spaceport and the observatory at Knappville, the only two installations which can trace them beyond 100,000 miles. Ships don't carry that kind of magnetic detector field."

IT WAS true. In his mind's eye Zircon saw the speedy atomic-bombers slip in over the laboratories of Tonawanda. He had friends there, good friends.

"You all agree with this?" he asked. They nodded. "Then what about the ultimatum?"

Green smiled broadly, slowly lighted a *tong-weed* cigar. He seemed very pleased with himself. "That was a dodge to gain us time. They won't expect any action from us for the next two hours. That's all the time we need."

"You're going to need a lot more," said Zircon. He moved quickly. From the bundle of maps he pulled the lethal toy, the small ray pistol which never left him. He swung it from one white face to another.

"Keep your seats, everybody," he snarled. "None of these mad plans of yours are going to work—because I say No!"

That was when Threnda flung herself on him. "Darling! Darling!"

she cried, and he felt his pistol arm jammed close against his side. "Darling, you mustn't!"

Hamada's face swam in front of him. He snapped a quick shot and saw the man's head disintegrate.

Threnda would not shake loose. Heckel, Mendez, Green and O'Leary were on their feet now, pale but determined, ringing him in, closing the circle about him.

"Let go!"

"No, no! You mustn't."

He hooked a hard left to her jaw, felt her body stiffen, then wilt.

The move came too late. Something crashed into his skull and the night swept over him. Robinson! He had forgotten Robinson! The Australian had sneaked up behind him as he struggled with Threnda. Then that thought, too, was swallowed in the black.

HE REGAINED consciousness slowly. His surroundings pressed themselves onto the pattern of his mind in flashes, as if a window were opened for a fraction of a second, then closed. He knew first that his hands and feet were bound, that his muscles ached atrociously from long confinement. Then night claimed him again. An hour . . . perhaps a day . . . later he knew that he was lying on a bright steel floor, jammed tight against a bulkhead of the same metal, and that there was an intolerable heaviness about him and a sense of pressure in his ears, as if they had listened too long to deafening noises.

Somebody was holding a cup to his lips and from far away a voice said: "I think he's coming to." That was Melissa.

Another voice said: "Who cares?" That was O'Leary.

Zircon drank the soup. Melissa held his head.

The hot liquid dragged him back into a painful world. He was lying in the main cabin of a space-freighter, jammed against the after bulkhead by the terrific acceleration, at least four gravities. Melissa was pressed against the wall beside him, gathering her forces for the struggle back to the table with its padded chairs. A strong girl. Few men would have attempted that errand of mercy.

The others were at the table, Green, O'Leary, Robinson—why had he overlooked Robinson?—Mendez and Threnda. Threnda held to her chair arms with fingers white at the knuckles. The acceleration was all but too much for her.

"What's happened?" asked Zircon.

"We've wiped out the observatories at Knappville and the Martian Spaceport," said Melissa. "Right now we're twenty hours out from Mars and doing five G's, with the Bighead space-fleet well behind us." She struggled but gave up. "It's no use. I can't get back to the table. I'll have to stay here."

"They can't catch us?"

"No chance. The Bighead spacemen aren't trained for accelerations like this."

"Can't some of the fleet units—the ones nearer the Earth—intercept us?"

"There's just a chance, but Green says we're a lot more manœuvrable than they are. No . . ." Melissa had to stop to pump air into her lungs. "No. It looks now as if the Bighead empire were done for. Some time tomorrow the ships will be deploying over Terra to wipe out the targets you marked."

ZIRCON cursed himself. How could he have been such a fool, how so blind to the real ambitions of Marcus Green and Dennis O'Leary? A world ruled by such men would be infinitely worse than anything man had seen under the Bigheads. Soon they would be fighting among themselves. Then war would return to mankind and civilisation would be gone for good.

"How do I happen to be alive?" Zircon asked.

"Threnda wanted you and her father backed her up. Said you were harmless now that the Pinheads had picked your brains."

So! Threnda had wanted him! Then she had not been merely a tool of the Pinhead bosses. She had loved him—at least enough to wish him spared. What relief he felt was bitter in his mouth. She had loved him—but not enough to warn him of what was afoot.

Green was bent painfully over a map, plotting positions. He barked into an inter-communication phone and a string of figures came out. "Great!" he exclaimed. "In another two hours we'll be absolutely safe. We can cut back to two G's and the Bigheads can never catch us, even if they tune up to five."

"The only hope of the Bighead world," said Zircon, "is that my father has been able to get a warning through, so that the various headquarters are prepared and some of the raiders can be intercepted."

"There will be no warning," said Melissa. "We have been jamming the radio bands ever since we took off. Nothing could possibly get through."

NESTOS found a terrified ground-ape hybrid in the lower reaches of the Krypto Mine and batted the truth out of him.

"Really, sir!" he insisted. "I would not deceive you. There was a fight. See! Hamada's body is still there. Then they disarmed Zircon and took him away."

"But did not kill him?" demanded Pluton.

"Absolutely not, sir," said the ape. "They went up the lift in 500 space-bombers and took off. Your son was still unconscious but the girls handled him tenderly."

Pluton turned away from the little group of waiting Councillors. So Zircon had learned that his colleagues were double-crossing him, had tried to block them! He was no longer a renegade Bighead, even though his treachery might end Bighead supremacy forever.

The Moderator turned on the group. "We may have to start again," he said, "but it will be worth it. Pinheads will wipe out our installations. Then, by the Great Blakeney, we'll wipe out theirs, smash them beyond possibility of rebuilding in ten generations!"

"Order the men to the ships. We take off in fifteen minutes. Set a course to intercept the main fleet. Then our massed fleets will advance on Terra in a war which can have no compromise, no truce, no end but Pinhead extermination!"

GREEN pressed a buzzer on the table and spoke into the ship communication system. "Use the blinkers to tell the other ships we cut back to two G's acceleration, commencing at 0215:00:00."

Five minutes later the bomber fleet went into the standard deceleration procedure. Pressure eased off. Zircon found that he could adjust his position, manacled though he was. Melissa rose.

"I'll see if I can get the keys to your handcuffs. You're certainly not going anywhere and there's no point in keeping you locked up like this." She followed Green, O'Leary, Mendez and Robinson into the control room.

Threnda stirred. "Are you all right, dear?" The blood was pumping back into her wan face. She rubbed her hands together to restore circulation.

Zircon answered her shortly. "All right, I guess. Thanks for saving my life."

"But of course I had to, dear. I fooled you. They used me as bait and I had to go through with it, but I *did* love you."

"Within your limits," said Zircon.

"Zircon! That's not fair! I proved I loved you, didn't I? What would you have me do, go against my own father?"

"Work it out with your own conscience," said Zircon. "I'm not interested."

Through the reinforced plastiglass which walled either side of the cabin Zircon could see the Pinhead bomber fleet. They were small ships as such ships went in those days but under the nose of each was a bomb capable of wiping out 100 square miles of factories and homes. With a sinking heart Zircon recognised that all the nearer ships, possibly all the ships, had been fitted with the small defence ray device which he had invented to save the *Maggie Donavin* from the attack of the cruiser *Jocko Norris*. Even if elements of the Bighead spacefleet should attack—perhaps elements which had not been ready in time to sail with the main fleet—these Pinhead bombers would be relatively safe. They could start the lethal rays back on themselves and blow up the ship which launched them—provided that each had to deal with but one attacker.

Melissa came in with a handful of keys and unlocked his hands. "Help me get him to the table, Threnda," she said. "He's still weak and his feet are fastened."

Threnda rose slowly, "I'm going to my stateroom," she said. "He says he's not interested in me." She went out.

Zircon crawled to the table and Melissa helped him into a chair.

HOURS slipped by. Now and again O'Leary or Green would come back through the cabin and from the control room would emerge a brief burst of sound. The Pinheads were still jamming the Bighead radio. There would be little warning of the attack, perhaps none. But Terra was coming nearer. Tension was rising. Blinkers were going constantly on the ships off either bow. Zircon read the messages.

"We're deploying now," he said. "We come into Terra's atmosphere at about ten miles and flatten out. Then this ship takes the first target—Karachi, Pakistan. There's a Bighead armoury there. Then we take Kunming."

"There's another blinker order going on this side," said Melissa. "After the destruction of Karachi, we stop jamming."

"Wouldn't be much point in keeping it up. Bighead groundlines will carry the warning. That means that there may be a little defence. Perhaps some of the Bighead installations will get through."

The motors went off and the lighter pull of gravity took over. Melissa went to the window and looked downward.

"We're coming into Karachi now," she said. There was a bump. "There goes the bomb." The second bump a minute later was hardly perceptible.

"Good-bye Karachi," said Melissa. "I shan't miss it much."

"Kunming may be tougher," said Zircon. "There's a small surface sky-

squadron there, not meant for space travel. If Bombay village felt the detonation and sent out an alert some of the ships may be up."

"That we shall see," said Melissa. "At our present speed we should be there in about 150 minutes."

Surface fighters were up over Kunming, 50 of them glinting in the early morning sunlight. Zircon's heart leaped as he saw them come in in triple teams. The limited ray defences of the Pinheads could not meet them all. Some, at least, would be able to get through to the attackers.

Flash! Green's ship lurched as its neighbours to right and left disintegrated in mid-air.

A second flash. Two of the three Bighead patrol ships disappeared, their rays driven back into them. The survivor sheered off, zoomed up to join another group. The fleets shot by each other. The first pass was over.

Down below, the city of Kunming disappeared under a mushroom of red smoke. The designated bomber had done its job.

BLINKER signals stepped up the acceleration of the Pinhead bombers. The cabin became sweltering as air friction chafed the sides of the ship. This could not go on at this altitude. The raiders aimed higher.

A sternward telltale showed back dots on the sky. The Bighead patrol was following! The dots grew larger. They were gaining! A stern chase was on.

"They're in range now," said Melissa. Ray-gun flashes winked like blinker signals from the pursuing ships. Each meant the death of a bomber—or the death of its attacker.

Melissa turned back from the telltale window. "It's all over now," she said. "We got all 50 of them—and they got about 100 of us. I wonder what we hit next." She went into the control room.

Zircon was alone. He stretched himself. He yawned, for his nerves were screaming. Then his heart leapt—for Melissa had left on the table the bunch of keys with which she had unlocked his wrists.

Hurrying, fumbling, he tried them one after the other. At last! The right one! The ankle-irons fell away. He was free!

Zircon balanced on his toes, flexing his leg muscles, forcing the blood back into them. Then he moved rapidly to the bulkhead against which he had rested, found a wrench. It was a large one, perhaps 15 inches long, and it balanced in his hand as if designed to be a weapon.

Stealthily he approached the door of the control room. If he could take the Pinheads unaware...

Pressing himself against the wall to the right of the door, he tapped on the control room door.

"What is it? Come in!" It was O'Leary's voice.

He could not go in. He must make the Pinhead leaders come out.

He raised the wrench to tap again.

"What are you doing there? How did you get free?" The voice came from behind him and the voice belonged to Threnda.

He turned. Slim and beautiful as ever, she stood in the passageway leading to the staterooms. In her tiny hand was an old-fashioned automatic pistol.

"If you don't drop that wrench I shall shoot," she said.

He did not drop the wrench. Instead, he lunged for the knob of the control room door.

Crack ! The bullet smacked into the metal close to his hand.

Crack ! Another bullet creased his shoulder. He felt the blood start, warm and sticky.

Involuntarily, with the shock of his wound, he dropped the wrench.

THEN THEY were all about him, pouring out of the control room, Green, O'Leary, Robinson and the rest. Some of them carried pistols. Half-consciously, he was aware of Melissa on the fringes of the throng, his own ray pistol in her shapely hand.

"What goes on here ?" demanded Green. His eyes took in Zircon on the floor, Threnda with the smoking pistol in her hand.

"He got free, father, and was going to attack you with the wrench."

"And you stopped him ? Good girl !" He stood over Zircon, looking down. "We've had enough trouble with you, young man, and this is the time to end it. This time you go out the air-lock." He turned back through the door to the two crew-members in the control room. "Grab him, you two !" he ordered. "The ship will fly itself for a while."

The men came out, leaned over him.

That was when O'Leary disintegrated. One moment he was standing there, a cruel grin on his hard face. The next moment he was nothing but a wet mess on the floor. Mendez was next. His body no longer blocked the light and Zircon could see Melissa. With the ray pistol clutched in her fist, her face pale but her eyes determined, she was turning the pistol on first one, then another, of the Pinheads.

Robinson was down !

One of the crewmen straightened up. His remains slopped over Zircon's prostrate form. Zircon tapped the other on the head with the wrench.

Great holes opened in the hull of the space-bomber, for the ray pistol went right through its targets and liquified the steel beyond.

But now Threnda was shooting, too. The heavy pistol kicked twice in her hand. A red streak showed above Melissa's knee.

TO ZIRCON it was all slow-motion . . . the manner in which Melissa turned the ray pistol from Green, Green with the terrified grin frozen on his face, to Green's daughter. Actually, the whole action could not have taken a tenth of a second . . . the snap-shot of the ray pistol toward Threnda . . . the gaping hole in the hull beside her . . . her startled dive down the passageway.

"But, look ! Look !" babbled Green. "Can't we talk this over ?"

"No," said Melissa, and shot him. Where he had stood, solid and hearty, there was no more Green.

Breath was coming hard. A draught swept across Zircon, rushing the air of the cabin out into the rarefied atmosphere of the stratosphere. He began to gasp. In another minute, a few seconds, perhaps, he would be as dead as O'Leary.

Then Melissa was at his side, tugging at him, raising him to his feet. "Into the control room," she said. "Quick !"

The heavy door closed behind them.

"What about Threnda ?" asked Zircon.

"If she isn't dead already, she soon will be. Do you care much ?"

"Not a great deal," said Zircon. Melissa's body was warm against him.

"I'm glad," said Melissa. "I wanted you for myself."

Zircon kissed her. She kissed back. For a moment the Pacific spun under them.

The girl broke away. "How about your wound? Is it serious?"

"Nothing much. Little more than a scratch."

"Mine's a bit more than that. Let's patch each other up and get to work." She laughed. "You don't know who I am, do you?" She reached into the roots of her hair, extracted a tiny badge which fastened with a clip. "Melissa, Operative Q-47 of the Bighead Secret Police. You were in love with me once in Peru, Vermont, when I was twelve and you were sixteen."

"You've changed."

"Yes. Filled out a little, while other girls have filled your eye." She broke open the medicine kit.

PLUTON and Smith studied the most recent radio intercept.

"ORDERS (it read) TO THE PINHEAD BOMBER FLEET QUOTE BOMBING ATTACK ON TERRA ABANDONED. WE MUST RETURN TOWARDS MARS AND WIPE OUT BIGHEAD SPACE-FLEET IF OUR VICTORY IS TO BE CERTAIN. COURSES FOLLOW..."

"What do you make of it?" asked Smith.

"They've gone mad," said Pluton, "unless..."

Nestos stuck his big head out of the control room. "Pluton," he said, "your son did it! Your son and one of my operatives! They've been sending out the orders from the Pinhead flagship and now they're reporting to me in cypher!"

Pluton rubbed his hands together. "Great!" he said.

"And they're in love," added Nestos. "They said so."

"Even better," said Pluton. He turned to Smith. "Jerry," he said, "now that this thing is over—or all but over—I'm going to bow out and leave the running of things to you. I'm beginning to think you're right. Man needs incentives. He needs things to strive for, the joy of accomplishment. You're the senior councillor, so the reform is up to you. You and Zircon go to work. I'll stand by and help."

Pluton and Smith shook hands. "The first thing we do," said the latter, "is break down the arbitrary dividing line between Bighead and Pinhead. That has always been a lot of hogwash. A man with good horsesense, if he has energy and determination, can be an even more useful citizen than one of these super intelligences of yours. The super super boys are too apt to be impractical dreamers."

"Maybe you're right," said Pluton.

"Of course I'm right," said Smith. "Look! Perhaps I shouldn't let the cat out of the bag, even now, but your new Moderator of the Supreme Council is actually a Pinhead."

"You! A Pinhead?"

"Sure. I bribed the girl who kept the records to change mine. Later, I married her. She still keeps the records down in Perth. I don't dare let anybody else handle the job." He grinned. "But now that I'm Moderator she can have a vacation."

THE END

BIGHEAD

THE SPIRIT OF EARTH

By SYDNEY J. BOUNDS

It had served Man throughout the System, but now the Captain only had a handful of crossbreeds to rely upon in an emergency.

Illustrated by HUNTER

"LEFT, RIGHT ! Left, right ! Pick 'em up, Number Three—swing those arms shoulders high !"

The Captain's brittle-hard voice cracked across the level, close-packed ash and cinder parade ground, sharp and staccato, each syllable snapping like the crack of a whip.

"You, Number Five—d'you leave your spine in bed this morning ? Straighten up, man !"

Number Five made an effort to obey the command. His long, gangling frame stretched upwards, the bones creaking under a mahogany skin, sweat running down his gaunt face.

"Squad, halt ! From the right—number !"

Terse monosyllables danced down the ragged line.

"Look alive—smartly now ! From the right—*number !*"

A machine-gun crackle of indistinguishable numbers repeated and again the Captain put his tiny squad through their daily drill.

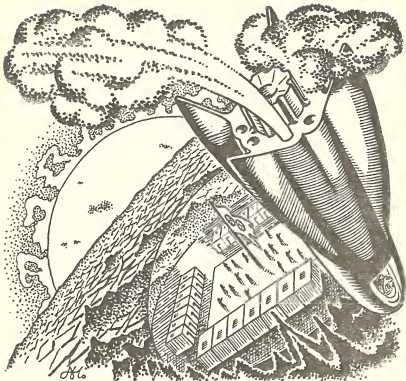
Outside the fused silica dome, the sun, an enormous ball of fire, hung suspended, shooting scarlet tongues into the black void. Under the life-containing dome, behind the Captain, a tattered flag hung lifeless at the halcyards, faded now, but with the twin hemispheres still faintly green against the blue backcloth—Earth's symbol of conquest throughout the Solar System.

The aluminium huts of the outpost huddled close together as if they, too, knew by what slender thread life was maintained in the twilight belt of Mercury. On one side, the sun reigned supreme: here, liquid metals flowed in incandescent streams and molten rock bubbled in lakes of lava. On the other side, the timelessness of eternity fused with the blackness of space to make a desert of frozen ash and slag, a wasteland of grey dust and death.

A planet without air, without water, without life—until the men of Earth arrived to plant the flag with the twin green hemispheres. The flag symbolised a conquest over nature—but it was the dome, with its synthetic atmosphere, that made life possible. That, and the spaceship which called every second month to replenish the water tanks buried deep beneath the grey ash.

OUTPOST SUNSPOT it was called, a name chosen with grim humour by someone who had never left the safety and comfort of the mother planet.

NEW WORLDS



The outpost had been established originally to study the flaming tumescences flung out by the sun, but conditions at the post were so unbearable that no scientist could be prevailed upon to remain there for any length of time.

Occasionally, a young hopeful, fresh from a university, scornful of the post's reputation and with one eye to a seat on the World Council, would arrive for a short tour of duty. Invariably, he would leave on the next spaceship. Outpost Sunspot was no sinecure.

Meanwhile, the Captain, with a skeleton garrison, waited . . .

"You're a ragged lot, at best. You've spines of jelly and feet so flat you fall over at every turn, but you're men of a sort, I suppose—though there are times when I doubt it! You've a dozen breeds mixed up in you . . . you scum of five planets!"

The Captain drew his spare frame to attention. The walnut skin was lined, his eyes clear and bright and shining a little.

"It's spirit you're lacking—the spirit of Earth—but I'll knock some of it into you, never fear! Duty and discipline is what you need, and, by God—I'll see that you get it! All right . . . squad, dis—miss!"

The Captain snapped a smart salute to the flag dominating the parade ground. His men performed a ragged imitation and started to break up into formless groups, but the drift away from the parade ground was dramatically halted.

An arm raised and pointed. All eyes lifted, staring through the dome to the fantastic sky beyond. Backed by the glare of the sun, the black hulk of a spaceship swooped crazily, drunkenly, towards the planet's half-molten, half-frozen surface.

It came on erratically-flaring jets, swinging first over the seething, shifting sea of liquid metal and molten rock, then over the frigid waste of frosted, grey dust. Crossing and recrossing the narrow twilight belt, swooping lower with every passage, the spaceship zig-zagged out of control, threatening at one moment death by calcination, at the next by freezing, for her helpless crew.

The Captain's body was rigid. He sheltered his eyes from the glare of the sun with a hand the colour of walnut. Something stuck in his throat, choking him. Not a man moved on the parade ground, not a sound disturbed the silence under the dome as the spaceship plunged on its last dive.

IT CAME out of the sun like a mad thing, plummeting across the volcanic sea, across the twilight belt, crashing into the frozen ash of the dark side. They waited, tensed for the explosion, straining their ears for the sound they knew could not cross the airless surface. Their eyes stared unblinking, waiting for the bright flash that would tell them the fuel tanks had gone, that the ship was no more—and the crew beyond help.

They waited . . . for seconds that ticked by like lifetimes on eternity's clock-face . . . and still the tell-tale flash did not come.

The Captain's voice was quiet: "Volunteers for a rescue party."

There was no word of dissension, no hesitation on any man's part. They stepped forward as a unit, paying silent homage to the spaceship's crew, who might, even now, be frozen in death. But the fuel tanks had not exploded—and while there was the chance of even one man lying there in the shadow of death, waiting for the icy grip to seize him, the Captain could pick his volunteers for the rescue party.

The Captain felt a pride in his men, a pride he had once felt in very different circumstances, and had never thought to know again. He walked slowly down the ragged line, picking his men.

"Long Tom."

A gangling frame of creaking bones and mahogany skin straightened up. The gaunt face smiled, smiled as it had once under twin Martian moons, treading the red desert.

"Shilo."

A squat figure shifted from one splayed foot to another. A light flickered deep in yellow eyes—eyes that had looked out over the hideous landscape of massive Jupiter.

"Sturm and Jeri."

The brothers' dark, impassive faces revealed nothing. They might have been volunteering to make up a foursome at space poker—or booking a return passage to their native Venus.

"Blacky."

Once he had been a space jockey, riding Saturn's rings: now he was just one more derelict at Outpost Sunspot, the dumping ground for broken men, the end of the journey from which there could be no return.

"Break out five sleds; single rations out; double rations back. We leave in one hour."

The Captain turned away to hide his face, for surely the doubt must be written there—the doubt that the human dregs he commanded would stand up to the incredible rigours of a journey across the dark side. In that moment he would have given anything to know he had one man of Earth at his back . . .

THEY MOVED in single file over the grey ash, leaving the twilight belt for the land of eternal night. Long Tom, a gangling figure even when space-suited, was out in front, balanced on wide frames of rawhide to distribute his weight over a larger area. Even so, to halt for long, was to sink into the fine dust.

As he glided forward, Long Tom tested the surface with a slender pole, prodding the dust to locate hidden chasms beneath the deceptive smoothness of the rolling dunes.

Behind him, the Captain plodded, harnessed to a sled bearing the precious water, frozen into hand-sized blocks of ice. Later, the blocks would be passed through the airlocks of their spacesuits, heated chemically to a liquid for drinking. Concentrated food wafers were taken in the same way.

The Captain looked back at Shilo, pulling the portable acetylene-cutter which might be needed to free the men trapped in the wrecked ship. Blacky hauled the sled with the food wafers. Sturm had the ice blocks that would mean life or death on the return trip. Jeri dragged a sled of medical supplies.

Behind the last man, a dot, starkly black against the flaming sun, proclaimed the position of the dome—last outpost of man against inexorable Nature. Perhaps they would never see the post again. Perhaps no living man waited at the wreck. Perhaps it was all a waste of effort, of lives . . .

Desolation stretched before them to a near horizon; a bleak, forbidding landscape of eternal frost, of a world dead for countless centuries. The sterile wilderness of grey ash was all they knew, never changing, undisturbed by any breeze. The silence was absolute where air was a dream in men's minds.

Six men and five sleds . . . and somewhere in that frozen waste, the wreck of a spaceship and, perhaps . . . survivors ?

ALL DAY they marched in a land where time was measured by a dial on an oxygen cylinder, where ice was thawed to quench their thirst, where they chewed hungrily on concentrated wafers, still marching, not daring to stop for fear of sinking into the endless dust.

Flaming tongues of scarlet tipped the horizon behind them, sinking lower as they trudged further into the desert. Even that little light was taken from them on the second day. The sun was a memory in the heatless dark all around.

Searchlights on the sleds showed gaunt, jagged peaks rearing up from the frosted slag. The night became eternal, black, cold and silent. It was here that the Captain heard the voice.

"Too late . . . too late, again !"

The voice went round and round inside his head, tormenting him with doubts and fears. It brought back memories he preferred to forget—memories of another rescue party, on another planet.

But he had been younger then, and dressed in the blue and gold of the Space Guard. There had been a crash, and men were waiting for the rescue

party—a team of volunteers led by the Captain. He remembered the difficulties and delays, the shining spirit of his men, all hand-picked, all Earthmen—but they had been too late. There were no survivors.

He had a name in those days, a name high on the roll of honour. But the Guard required perfection, for nothing short of that could maintain the precarious foothold of Earth's colonies on hostile planets, in alien environments. And he had failed in his duty . . .

That was why he had buried his name in the past, used only his old title, when he had been reduced to the command of Outpost Sunspot, from which no man returned.

The second day merged into the second night and into the third day—but only by the dial on his oxygen regulator could he tell. The sunless blanket of eternal midnight hung like a shroud over the planet, and the searchlight beams showed jagged cliffs of frozen rock and a cruel plain of frosted grey ash as far as the eye could reach. And still that fateful voice echoed inside his head.

"Too late . . . too late !"

IT was on the third day that disaster struck.

Long Tom was ahead, testing the ground with his pole, and the Captain followed close behind with the sled of precious ice-cubes.

The Captain bent his back and strained at the sled. He could feel the runners jar on the uneven surface, could feel the drag. He pulled the sled, then, for a deathless moment, he pulled nothing. Stasis. Then the sled was pulling him, backwards—and downwards.

He felt the harness tighten across his chest, his feet slipped and skidded on the ice-smooth rock. He flung out his arms, glanced backwards. The bright beam from the sled behind showed a rift that had opened in the slag—a crack through which the sled had dropped, dragging him after it.

The sled seemed to balance on the edge of the abyss, sliding smoothly, sliding ever so slowly into the darkness below. He glimpsed the jagged walls of the rift opening wider—treacherous jaws of death waiting to swallow him.

He tried to brace himself. Then came the shock of the sled plunging into space—his leg twisted inside the spacesuit—something snapped . . .

Through the wave of pain engulfing him, the Captain saw Long Tom, knife in hand, running towards him. The knife flashed in the searchlight beam, slashed through the harness. The intolerable weight on his back disappeared and strong arms pulled him to safety—but the sled, with its precious load of ice cubes, was gone, swallowed by the black maw.

There was pain, a dull throbbing in his leg, when the Captain woke. He was stretched out on a sled, helpless. Gaunt crags stabbed the searchlight beams, inanimate vultures waiting to claim their victim. Spacesuited figures loomed out of the blackness. And a voice wailed dismally inside his head.

"Too late . . . too late, *again*."

The Captain waved a hand: Forward !

There was a shuffling hesitation from the grotesque figures grouped around him. One leaned over and touched his own glassite helmet to the Captain's. A muffled voice seeped through the crude contact.

"Better to turn back, now. Better to save six lives . . . if we go on, there will not be sufficient water for the return trip . . . *if* there are survivors."

The Captain saw the dark, impassive face of Jeri looming over him. The face went away and its place was taken by the other brother, Sturm. Their helmets touched.

"Orders," said the Captain. "We shall go on until we have found the wreck and seen that no man lives. My leg is broken so you will pull me on one sled—a two-man load. Rearrange the sleds accordingly. Sturm, you will see that the ice cubes for the return trip are not touched until we reach the wreck. Rescue party—Forward!"

THE caravan moved on through the wilderness, through frozen blackness as silent as the grave. The Captain saw the backs of the two men pulling him, felt the pain as his broken leg swelled inside the spacesuit. He gritted his teeth and ignored the voice that echoed inside his head.

Duty and discipline, the code of the Space Guard—duty and discipline to forge the spirit of Earth. If only he had one man of Earth he could call on . . . one *man*, instead of the scum of five planets.

Bastards every one of them, crossbred between colonists of different worlds. Long Tom, from Mars. Shilo, from Jupiter. Sturm and Jeri, from Venus. Blacky, from Saturn. Men without a race, born under alien skies, impressed with alien environments. Men who knew of Earth only from the speech of others. Men who had been tried—and failed.

And yet, deep down in each one of them, must lie the undying spirit of Earth, the spirit which had driven their progenitors out into the vastness of space, seeking new worlds to conquer.

He was the only true Earthman of the lot, the only one of the broken men washed up on the shores of Outpost Sunspot, to know the blue skies and green hills of Earth.

The Captain remembered, as if from another life, a garden fragrant with spring blossom, when he had watched white puffs of cloud drift slowly across the so blue sky. He remembered, too, another time when he had sat on a yellow seashore, his bare toes wet with clinging sand, staring out across the rolling, white-capped waves. But all that was so long ago . . .

Now, there was only the unbroken monotony of the searchlight beams, the silence, the backs of the two men hauling the sled, the enduring frost, the jagged peaks one with the eternal night.

It was a time for good men—for men of spirit—and he had only the dregs of humanity's cup to carry out his commands. He slept uneasily, his leg throbbing like a drum. His eyes opened on blackness, closed to blackness. He sank back into monotonous pain, knowing time passed, but not knowing how long.

Sometimes his oxygen cylinder would be changed for him; he recognised the faint hiss of gas. He remembered the clean, fresh smell of mountain air back on Earth, longed to feel a breeze tingling his skin again.

Sometimes Blacky would force a food wafer through the airlock of his spacesuit; he choked on the dry-as-dust wafer, his mouth parched for lack of water. Then he knew that Sturm was carrying out his orders—the ice cubes were being saved for the return trip.

And, whenever he woke, the voice haunted him.

"Too late . . . too late."

DAYS later—it must have been days—Sturm's face loomed through the pain and darkness, drawn, the skin cracked. His voice carried dryness through the contact of helmets.

"We are *very* thirsty."

The Captain's reply was a croak.

"You will go on until you find the wreck. You will not touch the water until you are sure there are no survivors."

The face went away. He felt the sled move again, saw the backs of the two men hauling him. When next he dreamt of Earth, he splashed about in a lake of crystal water, limpid clear, with the surface ripples reaching to the willows by a grassy bank. So much water . . . it was agony to wake again to the dryness in his throat.

The skin crackled as his mouth gaped and a swollen tongue licked parched lips. The shadows cleared from his brain and he knew the sled had stopped. No longer did he see the two bent backs.

A silent play was being enacted before his red-rimmed eyes. Two grotesque, spacesuited figures fought in the searchlight's glare, backed by cruel pinnacles of black ice. They made no sound as they struggled, welded together as one fantastic robot.

Water !

The Captain struggled upright to a sitting position, his broken leg preventing him moving further. He lay and watched two men, stripped of all humanity, two beasts fighting for the water that meant life or death.

He could not tell who they were. One must be Sturm, fighting to carry out his orders, to save the precious blocks of ice for the return trip. The other ? He could not see through the glassite helmet.

The others were grouped in silent watchfulness, a pack of vultures awaiting the outcome. The Captain slid back, helpless to intervene. There was nothing he could do—the success of the rescue depended on Sturm.

There was a glint of steel in the searchlight's beam. A knife rose and fell, probing for a joint in the other's space-armour, seeking to force a crack to let in the freezing cold that would mean instant death. They swayed, locked together, rigid against the gaunt rocks, grappling for a hold to deliver the death blow.

The Captain watched the knife descend, slowly against the other's steely wrist, moving down through a long arc, arm extended, forcing downward.

Suddenly, it was over. One figure straightened up. An arm signalled: Forward !

The scene faded from the Captain's mind as he sank into sleep but, now, a smile covered his cracked lips. Sturm had won . . . the spirit had conquered.

AGAIN the unchanging monotony of the bleak landscape, the cold silence, the never-ending darkness. He slept, to dream of blue skies and green hills; woke, to the bent backs of two men hauling the sled. And slept again.

Someone was shaking him. Sturm's impassive face loomed beyond a glassite helmet. His voice was a dry whisper.

"See . . . the wreck !"

The Captain roused himself, sat up, leaning on one elbow. Before him, stark against the cliffs, lay the crumpled hulk of a spaceship and, projecting

through a porthole to show that someone yet lived—a flag bearing the twin green hemispheres of Earth.

He knew then that never again would he hear the voice inside his head, the voice that cried:

"Too late . . . too late !"

He remembered something else—the fight. His eyes searched out faces behind glassite helmets. Not five, now—only four.

Sturm, of course. Shilo. Long Tom. Blacky. He ticked them off, one by one. Jeri?

He touched his helmet to Sturm's, looked clear into the other's eyes.

"You fought—your *brother* !"

For a moment, the dark face lost its impassiveness. Sombre eyes revealed a soul seared and tortured almost beyond endurance. The voice was racked with pain.

"He wanted water—to turn back . . ."

The Captain's body stiffened and he could not keep the tears from his eyes. His arm raised in formal salute, a salute to the spirit which had inspired the other man—the spirit of Earth, not born of duty or discipline, but inherent in every descendant of the mother planet, which had driven Sturm to sacrifice his own brother that the greater brotherhood of man might be served.

He hid his face, which was shining through tears of joy, as they began to unload for the return trip.

THE END



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CHEMICAL PLANT

By IAN WILLIAMSON

The Persephone crash-landed at the most conspicuous spot on the planet. It should have been easy to find her. . . .

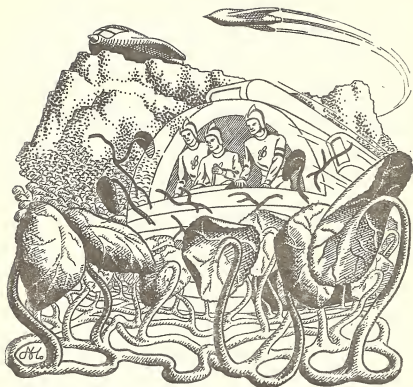
Illustrated by HUNTER

THE DISABLED cruiser came in low, fast, and almost out of control. Of the score of men who manned her, seventeen were inactive by reason of the savage deceleration. They were scattered at their various posts throughout the ship; each one supporting his body, sitting or lying, in whatever fashion he could contrive; with his hands locked around some rail or stanchion, his teeth firmly clenched, his eyes screwed tightly shut. In one sense, those seventeen were the fortunate ones: they had only to endure, whereas the three in the control room had also to think and act.

Of the three, the navigator, in whose hands resided what little control of the situation remained, was outwardly the least affected. He had fought the vessel down from the outer hydrogen levels to the lower troposphere, from a meteoric incandescence to a merely suicidal dive. He had ridden down two sets of engines beneath him in so doing, and was awaiting the collapse of the third and last. It was a superb piece of pilotage, for the *Persephone* had been moving at interstellar speeds a very short time before. The Captain had a microphone clamped before his teeth in a granite fist, and was painfully and harshly pumping words into it one at a time with his straining lungs. Beneath them, the Signaller was flat on his face in front of his keyboard. His eyes were closed, but his mouth was wide open by reason of the paper wed he had wedged between his teeth. This device quieted the whistling of his breath just enough to prevent its interference with the Captain's tortured whisper as it trickled slowly in through his phones and out by his automatically-jerking hand upon the sender-key.

AND THEN, miraculously, the murderous pressure eased; slowly, deliberately, the great elephant Inertia took its feet off his back, one at a time. He turned over and sat up.

"Have to put down right away," said the Navigator, now that speech was again possible "they'll go any second now." Captain Bascomb searched the unknown landscape for some identifiable spot, some—any—easily recognisable landmark. A featureless continent of naked rock turned beneath them, then over its rim appeared a bright blue sea. There was an estuary, a vegetation-packed bowl of valley and a river with a chain of coloured lakes. In spite of his urgency, the Captain found time to be astonished. "Sirius" he said, "what in heck is this?" He continued without waiting for an answer, "Put us down there," he said to the Navigator. "Should be no difficulty about locating



that." He spoke to the Signaller, "say we are putting down on the western edge of a continental mass, equatorial latitudes beside a row of—" he leaned forward to count, "—five coloured lakes. We shall put down beside—" he paused again to examine more closely the tilted landscape now expanding rapidly towards him, "—beside the red one." There was a level patch in the blue vegetation beside the lake, and he hoped it would be thick enough to cushion what was certain to be a rough landing. The failing engines barely succeeded in arresting her headlong dive, and the *Persephone* struck heavily with a grinding shudder.

The Navigator unlocked his fingers from the controls, carefully folded his arms across his board, and put his head down upon them, savouring the sheer luxury of mere passive existence. No one slapped his back or shook him by the hand. He had just saved their lives by an unprecedented feat of skill and endurance, but in the Interplanetary Service there is none of that kind of heroics. Their thanks were sufficiently shown in that he was left to rest undisturbed, while about him the ship's company gradually reassembled themselves and their wits, slowly absorbing the fact that they still lived.

The last flicker of energy in the batteries was run out in transmitting a repeat of the distress signal; and the Captain selected watches. There was little more to do but await rescue. The off-watches retired to sleep.

THEY SLEPT for about four hours, when the shouts of those on watch and the motion of the ship awakened them roughly. The ship was tilted at an alarming angle and still moving. A hurried inspection through the skin ports revealed the cause of the disturbance. The blue vegetation on which the ship had landed had bunched itself up into a hillock beneath the bulge of her side, and was slowly and deliberately rolling her towards the steep little incline which led straight down into the lake. Even as they arrived at this incredible conclusion a further shove turned the vessel on her back. There was a concerted rush for the hatches, but as they had expected the whole outer skin had been solidly welded into a continuous sheet during her incandescent plunge through the atmosphere. Her batteries were dead, she was therefore blind, helpless, and without means of communication. The welders could have carved a way out, but for the empty batteries. With a slow, relentless heave, she was rolled yard by yard to the lip of the incline . . .

TWO VESSELS picked up the distress signal and immediately hurried towards the indicated planet. The smaller, and nearer, was the Planetary ship *Hannibal*, under Captain Britthouse. The other was the Interplanetary ship *Berenice* under Commander Japp.

Neither of these officers was pleased to receive the signal. Their response was swift enough—as well it should be—but they were under no obligation to feign eagerness.

Commander Rupert Japp was on his way to a most important rendezvous—in fact the same to which the *Persephone* had been speeding when her inertia-shields blew. This was no less than the massing of the entire Sector Fleet at the conclusion of the decennial full-scale manoeuvres. Commander Japp expected to be under the very nose of the Admiral himself, and was anxious to make a prompt appearance. The distress signal put an end to his plans, and before many minutes the whole vessel was chilled with his displeasure.

Captain William Benjamin Britthouse was no more pleased than Japp. He too had a rendezvous, but not with a Fleet, not even with an Admiral, only with a girl. He had the ring in his pocket. The signal threatened to disrupt his plans also, but a rapid calculation showed him that by squeezing every last erg out of his ship he could afford to delay about three days and still be in time. It would mean that he would have approximately four hours to collect his leave chits, meet Jenny, propose to her, marry her, and get her aboard the Trans-Galactic express for Earth. He thought he could just about make it. He whistled up his two junior officers, Lieutenants Bob Crofton and John Michelson, to impress upon them the necessity for speed.

During the interval which elapsed while the two ships were hastening to the rescue, Planetary and Interplanetary Forces engaged themselves in another of their innumerable official feuds. Planetary Force assumed from the outset that since the wrecked ship was upon a planetary surface, and had moreover sent out a call for assistance, the matter was clearly under their jurisdiction, and command of the operation would fall to Captain Britthouse. Interplan were naturally quite livid at this bland assumption, feeling that as it was one of their own vessels that was in distress, and a Commander—no less—who was going to its aid, there was no need for the ground-hogs of Planetary to stick their snouts in. However, with the lives of twenty men at stake they were unable to press this view-point officially, and contented themselves with the

counter-assumption that obviously the command would automatically fall to the most senior of the two officers concerned. The fact that Commander Japp was undoubtedly the senior of Captain Britthouse in rank, service, command, and even age—most definitely in age—was, of course, purely fortuitous. Purely.

AT SOME remote stratospheric level in the organisational hierarchy an inspired compromise was reached: command of the operation would be assumed automatically by the officer in charge of the first vessel to enter the atmosphere of the planet on which the *Persephone* was wrecked. The message arrived as the two vessels swung in simultaneously, having made contact at the edge of the little system and ridden in together.

Captain Britthouse laughed. When Bill Britthouse laughed the fact was clearly audible over most of the forward part of his ship. It was a familiar enough sound upon this Planetary Force ship—an impossible *gaucherie* upon an Interplan craft. He waved the message under the noses of his two lieutenants and sat down helplessly, wiping the tears from his eyes; he was still young enough to find the situation extremely funny.

When he was once again capable of coherent speech he said, "Good. At least they haven't given in to the beggars completely. We can dig the silly fools out of whatever hole they've got themselves into, and leave the Office to sort out the proprieties later." He turned to the communications operator, "Present my compliments to the commander of the Interplan ship, and suggest a conference to discuss arrangements for co-operating in the rescue."

Commander Japp felt definitely annoyed by this message, he had been confidently expecting "place my services at your disposal," and this offer to co-operate was practically an insult. "Co-operate" indeed! With a mere captain—and a ground-hog captain at that!

He sent a blistering demand back to Command to rectify this intolerable situation at once. Meanwhile, he was under the necessity of humouring this puppy. He stalled with a suggestion that it might be better to locate the missing vessel first. (Captain Bascomb of the *Persephone* would then have no choice but to submit to his orders; that should settle it. Unfortunately it didn't—there was no *Persephone*.)

CAPTAIN BRITTHOUSE was eating when Lieutenant Michelson called him to the control-room. He wedged the remainder of his meal into approximately the shape of a sandwich and went forward with it in his hand. They were approaching a coast-line from the seaward side, over the bright blue sea. And it *was* a bright blue sea: not the hazy blue of depth and dispersion, but a genuine, opaque, new-paint, number-27-on-the-shade-card Royal Blue. It hurt to look at it.

"Get down to that stuff Mike," said Britthouse, "and let's have a closer look. Querest sea I ever saw."

It was vegetation, they saw as they dipped—billions of disc-shaped leaves like water lilies packed tightly together. The whole ocean was a solid sheet of them for hundreds of miles, apart from occasional channels which showed dark and menacing, with white-flecked wavelets marking the racing currents. They lifted again to continue the search for the *Persephone*.

Lieutenant Michelson read and re-read the distress signal, he still couldn't make sense of it "... a row of coloured lakes. We have landed beside the

red lake. Our engines are completely destroyed and our batteries are . . ." It had stopped there.

"What are you worrying about?" boomed Britthouse in his ear. He leaned across Michelson's table and pointed into the screen at the approaching coastline. "There they are, aren't they?"

There they were, true enough; five pretty little lakes, set against the dark-blue land-plant all round them like jewels in velvet. All different colours. There was a ruby, a sapphire, an emerald, a—"Where's the *Persephone*?" demanded Britthouse abruptly. No one felt competent to answer this question, as the *Persephone* most certainly was *not* beside the red lake.

If her distress signal was to be believed, her engines were so much scrap by the time she finally landed, so any movement under her own steam was out of the question. The location she had given was unmistakable. Nevertheless, she was not there.

Again Michelson brought the ship down for a closer investigation, passing as he did so the *Berenice*, who was already cruising up and down the little valley, having wasted no time in investigating the blue ocean. The *Hannibal* went out to the mouth of the estuary, and Britthouse took a quick look around. The sky-blue vegetation of the sea was sharply contrasted by a broad border of land-plant in a considerably darker shade which extended up all the beaches and parts of the lower coast-lands.

"Looks like vegetable life is just climbing out of the sea here," commented Britthouse, "seems a bit late. What's the atmosphere, Bob?"

"Earth-type, only about ten per cent. oxygen, though."

"That fits all right then," he said, "get right down to surface, then move up-river, Mike."

THE SEA-PLANT grew right up the estuary of the little river, leaving a few channels only near the centre for the main flow of water. The valley, with its string of lakes was packed with vegetation. It blanketed the whole bowl, it enclosed every lake—only a pronounced terracing proclaimed that it was not a huge bog.

"Perhaps I'm being wise after the event," said Britthouse, "but I'm sure I would never have put down in that little set-up. It's too pretty to be healthy." His lieutenants nodded agreement. Long experience had taught the Planetary men that life can play strange tricks upon the unwary; as a general principle they kept it at arms length until it had been fully docketed. "Why do you suppose he did it?" asked Crofton.

"The idea was good enough," said the Captain, "he knew his engines were done, and his radio might fail at any moment. He had no time to work out a reference-frame for the globe, and with a dead radio he could not give us signals to get a fix on. So he had to find some conspicuous landmark. He certainly did it—but he need not have sat himself plumb in the middle of it. He could have set down on that escarpment back there and still been easy to find. Point is: he's not there now. Get hold of the *Berenice* and suggest that we make a base upon the escarpment at the head of the valley and work out a plan."

Commander Japp, however, demurred. He was accustomed to operating from his ship, to him a planetary surface was either a port or a place to be

avoided. Accordingly, he invited Captain Britthouse to his vessel, pointing out the better facilities at his disposal.

"Blast the fool !" said Britthouse, "Facilities my foot ! I suppose he means he has a carpet on his chartroom floor." He turned to his junior officers, "You remain in charge of the ship Mike," he said, "Bob, tell Sergeant Davys to be ready to receive the picket-boat from the *Berenice*, and you come with me for moral support. These Interplan stiffs give me the screabies,—and none of this 'Okay boss'," he snapped as Crofton replied. "It's 'Very Good Sir', and click your blasted heels when you say it. Come on."

BRITTHOUSE would have shaken hands, but Japp greeted him with a stiff salute and led the way past the guard of honour to the officers' mess. The Captain was already sufficiently uncomfortable before they were half-way along the spotless corridor. He had not changed out of his service uniform, while Japp was resplendent in the full dress of a Sub-Sector Fleet Commander, Second Class. He gleamed, he rattled, he clinked as he walked along. But when they entered the officers' mess Britthouse stopped dead in his tracks. A formal dinner was set out, the officers of the *Berenice* were two rigid ranks of blue and silver, the table gleamed with glass and plate. Britthouse was more than astounded, he was shocked and horrified. Not far away, he thought, twenty men of this very fleet are lost, perhaps in peril of their lives, and this—this *popinjay* was staging a full-scale formal reception. Tradition hell, he thought, he was not going through with it. He squared his shoulders and turned in the doorway.

"Commander Japp," he said, "I would like a word with you in private, if you please." The Commander's face was expressionless. He had expected this, his trap was ready. His tone when he replied was faintly deprecatory.

"If you feel it to be necessary, *Captain* Britthouse, very well." His tone said quite plainly that only a boor from Planetary could be so ill-mannered. He turned to the room, "At ease, gentlemen, we shall not keep you waiting long."

In his cabin he faced the Planetary man; he stood inches taller than Britt's chunky figure, in spite of his stoop.

"Well, Britthouse, what is it ?" He contrived to be insulting, whether he used the title or not. Britt held a close rein upon his temper.

"I feel, Commander, that this is hardly an appropriate time to indulge in formal hospitality. In my opinion, we should be pushing on with our investigations with the utmost speed. We have no—"

Japp cut the young man short brusquely, "I have already despatched the necessary message," he said, "the entire Sector Fleet is already on its way at full acceleration, they will arrive in approximately eighty hours. Until then, there is nothing we can do."

Britt was caught completely off his guard. The unexpectedness of it took his breath away, he was momentarily speechless. "But—but—why call the Fleet ?" he stammered eventually, "cannot we deal with the situation ?" This was even better than Japp had expected, he sprung his carefully-laid trap.

"It would be quite suicidal, my dear Captain, to tackle a hostile civilisation with only two small vessels. In any case, the action is clearly prescribed in my Standing Orders. I have not the authority to hazard *my* vessel in the face of organised intelligence."

IF BRITT had been astonished before, he was now completely thunder-struck. He wondered which of them had lost his reason—the man might have been talking Andromedan Siltzish for all the sense he could make of it. At length he found a concrete idea to pick on.

"What organised intelligence?" he demanded. "What evidence of organised intelligence have you found?"

"I should have thought it was self-evident," retorted Japp frostily, "a Mark IX Light Cruiser, inertial mass 8,000 tons, vanishes completely within twenty hours of landing beside an obviously artificial watercourse, leaving no trace. Only organised intelligence would have the means to transport an object of that size in the time without leaving the most obvious traces. But, more significant still, only an organised intelligence would *want* to do such a thing. What non-intelligent creatures would approach an unknown object of that size? Or have you an alternative explanation to offer?"

Britt was stumped absolutely. Of course, he had no alternative explanation to offer. He had not even begun to theorise upon the matter—he wanted to collect some facts first, it was much too early to begin hypothesising. Still, there was no hope of explaining this point of view to this . . . this *Greek*, he knew the type: it would be waste of time to argue with the fellow. He suddenly remembered his rendezvous with Jenny, and was filled with a fierce exasperation and an impulse to be rid of the whole business.

"I am sorry Commander," he said, "I cannot agree with you. I must beg you to excuse us. I wish to return to my ship immediately."

No further word was spoken. In complete silence the two Planetary men filed past the ramrod guards and into the picket-boat. Britt was miserably conscious of having made a very bad showing, the situation had been sprung on him out of the blue—it did not occur to him that this may have been deliberate—and he felt that he had spoilt a good case by his reaction. He did not like being rushed into snap decisions, his own instinct was to examine any situation very closely before drawing conclusions. Japp was apparently one of those legendary heroes "famous for his ability to make quick decisions in emergencies." He had always mistrusted that ability, suspecting that it was simply an incapacity to see more than one possibility at a time. The recent meeting gave him no reason to change his opinion. He realised that it was out of the question to follow his impulse to clear out and leave the impossible Japp to his own devices. As long as there was a chance—however remote—that the men of the *Persephone* were still alive, he could not leave without doing his utmost.

He renewed his determination to see the affair through within the time-limit—with or without Japp's assistance, he was not going to miss his date with Jenny.

"So to-morrow," he concluded in explanation to his lieutenants, "we get out as soon as it is daylight and root about beside those musical-comedy lakes to see what goes on around here."

THE PLANET'S DAY was about thirty hours, and a pronounced axial obliquity gave them twelve hours of darkness and eighteen of daylight—ideal conditions for a man determined to work himself to death. Britt ruefully supposed that this would be necessary: he *had* to make his dead-line.

The early start produced a reward at once, the oblique rays from the planet's sun threw every irregularity into sharp relief, notably a long oval mound—

hitherto imperceptible—of the general shape of the *Persephone* right beside the red lake. They wasted no time in speculation, Michelson dropped the ship in a breathless dive, grinding to a standstill on the naked rocks beyond the blue belt.

Sergeant Davys was starting up "Jenny"—the tracked all-purpose runabout—as they fell, and within thirty seconds of touching down, Britt, Bob Crofton, and the Sergeant were clanking down the ramp in her. The little vehicle took the steep slope into the valley at an alarming angle, the chrome-molybdenum steel cleats of her treads shrieking and sparking on the rock. Sergeant Davys was an accomplished driver, and the runabout itself was built to take anything that the habitable universe could offer. It was practically indestructible, and its tiny nuclear motors had on one occasion driven it completely submerged through the swamps of Sirius IV under a gravity of 4.2. She did not even falter, therefore, when under Britt's direction the Sergeant drove her straight into the tangled mass of vegetation.

It was primitive stuff, four-foot stalks each surmounted by a flat disc of a leaf, soft and juicy, looking like nothing so much as a particularly poisonous brand of rhubarb. "Jenny" was in her element, you could see she thought this was chicken-feed. She tore into the stuff with gusto, lurching and skidding on the wet, rubbery stems, churning up a juicy pulp in her tractors. Shreds and tatters of it were flung across the transparent hood, until the *Hannibal*—guiding from above—was a blurred and rippling caricature.

"O.K. Britt," said Michelson's voice in the phones, "it's a few yards ahead of you now."

His instruction was unnecessary, the mound was clearly visible from ground level, being no more than an area of the vegetation of greater height than normal. The puzzling, inexplicable thing was that the raised patch was sharply differentiated from the remainder, was almost exactly the length of the missing *Persephone*, and was on the very spot where the ship had landed.

"Jenny" had churned her way through the length and breadth of the mound twice before they were compelled to admit defeat. Then Michelson had an inspiration.

"What's the ground like?" he said, "Is she buried down there?" The answer was no, the ground was rock, the naked bones of the planet.

"No soil?" queried Michelson, "Then where does that stuff put its roots?" The answer to this was another negative—the plants had no roots. The stems sprouted from a net-work of cable-like stems lying on the rock. Following the largest of these, they found that some went down into the lakes, some round the lakes, but most ran the full length of the valley, down the beach, and into the sea.

BY THIS TIME Britthouse was feeling somewhat frustrated. The only clue to the *Persephone's* disappearance was the odd little plateau of vegetation, for he was convinced that the plants and the strange coloured lakes were connected with the mystery in some way. It seemed that only a full-scale bio-survey would yield sufficient information upon the nature of the growths. He did not believe that there were any animals at all upon the land-surfaces—let alone intelligent ones. The planet was obviously in an early Silurian stage, and it was by no means certain that there were animals even in the sea, at this early stage.

There were plenty of examples of planets reaching even a late Carboniferous stage without the appearance of animals. His prospects of making his date with Jenny seemed to be receding. Already half a day out of his three had gone with no clear lead. In one of his customary transformations he suddenly snapped out of his mood of concentrated thought and became a humming dynamo of energy. He pieced together a plan for an ultra-rapid survey in five minutes, and within a further ten minutes there were three parties formed from the *Hannibal's* tiny complement, feverishly pursuing their assigned plan.

They had an exhausting and surprising day, meeting at dusk on the beach near the estuary, beside the sluggish sea—dead and waveless with the weight of its blue carpet of floating vegetation.

"Right," said Britthouse, as the hatch closed behind him, "let's have your reports. Mike?"

"The valley was originally glacial, I think," he said, "but considerable water-erosion has occurred since. The upper level, above the vegetation-line, was certainly a glacial hanging-valley: there is a sharp break in the level and a waterfall. The lakes are a puzzle, geologically, they could be a series of terminal moraines, but they are surprisingly regular. It is very difficult to form any conclusions about the lower valley, as it is entirely blanketed by the vegetation, even the lakes are each completely surrounded, and the stuff seems to grow on the bottoms also.

"The large-scale geology is simple enough, this area is a very old eroded plateau; comparing it with other areas in this hemisphere, it is one of the oldest land-surfaces on the planet. Which probably accounts for the fact that this is the largest patch of land-plant on the planet—as far as I have seen, nowhere else does it extend more than a few yards up the beaches or estuaries."

"That may be significant," said Britt, "How about you, Bob?"

"Simply a confirmation of what we guessed this morning: all the plant in the whole area is simply one tangled mass of vines, there are no individual plants, the whole mass is one enormous plant. That goes for the sea-plant too, it grows vines up the beach and estuary. The plant in the valley is an extension of the plant in the sea. The leaves are bigger and darker, that's all. What did you find, Britt?"

"ONE strange thing: although the plant floats on the surface of the sea, it grows on the bottoms of the lakes."

"Gravity of sea-water," said Bob.

"Sure," replied Britt, "that accounts for why it sinks, but not for why it grows. And it grows all round the lakes too, the water has to seep through yards and yards of it between one lake and the next."

"What about the colours of the lakes themselves? That's the most striking thing about the whole set-up from the air."

"It's not so startling from ground level," he said, "but the water is definitely coloured, and a different colour in each lake. To-morrow we are going to make a tour of them, and draw samples of water from each, and of the vegetation. We shall be doing some analyses. I know it seems remote from our purpose, but I think that if we can get at the reason for the existence of these lakes, we shall have a clue to the disappearance of the *Persephone*."

He turned to the signaller, "Have you got that lot on tape?"

"Yes sir."

"Good. Spool it off and send a copy over to Commander Japp, with my compliments."

Commander Japp's reply, received the following morning, was definitely offensive; he begged to inform Captain Britthouse that he was not interested in botanical researches upon the planet, and suggested that the information be reserved for the proper authorities. In point of fact, he was rattled. The activity of the *Hannibal's* crew had not escaped his notice, and he had an uneasy suspicion that Britthouse might yet sneak up on him. He remembered having heard some disconcerting whispers about the low cunning of these Planetary people. He fervently wished that they had kept their interfering noses out of an affair that was none of their business. Nevertheless, he felt that some action was now demanded of him, some more detailed theory of the *Persephone's* disappearance.

A NIGHT of worrying produced no result. It did not occur to him to consult his officers; without consciously expressing the thought, he felt that as Commander he was automatically the person most fitted to solve the problem. A cold shower and a well-served breakfast refreshed him immensely, and he took pencil and paper with the determination to settle this business. He wrote down the substance of his information after the manner of an Euclidean demonstration:—

- I. The *Persephone*, a Mark IX light cruiser of 8,000 tons, lands beside an obviously artificial watercourse with no engines and only enough reserve energy to transmit one distress signal.
- II. Within twenty hours the *Persephone* has vanished and there is no trace of any struggle, or of any machinery used to move her, except a small raised patch of vegetation on the spot where she presumably landed. (He was not above using Britt's information).
- III. Obviously, therefore, she was moved by air, and the patch of vegetation was a hasty attempt to conceal the spot where she crushed the vegetation.
- IV. It follows that we are confronted by a hostile and organised intelligence of some mechanical ability.
- V. Standing Orders, Section XVI, Chap. 473, Para. 28673 expressly forbids any attempt by less than three vessels to intervene in such a case, but to call upon nearest Sector Force.

This seemed to be watertight enough, but an attempt at a more detailed explanation would look better, in view of Britthouse's efforts, blast him. Why had the *Persephone* been kidnapped? Suppose she had not been kidnapped, but *destroyed where she stood*, and the blasted area patched up? That seemed even more likely. But why? Suppose the artificial watercourse was of a religious significance, and the builders had destroyed the *Persephone* in a fit of rage, and then been afraid of the consequences and tried to conceal the murder? He was suddenly elated, this was the solution! The next step followed automatically. As soon as the Sector Fleet arrived they would raze the whole valley flat as a reprisal, this would inevitably bring the murderers out of their hiding-place, and the Sector Fleet would assume control.

The Sociological Council would protest, of course, but it would be too late. He chuckled to think of the foolish spectacle that Britthouse would make with his detailed description of the trivial botany of a burnt-out valley.

JAPP lost no time in drawing up an official report embodying these conclusions, and transmitting it to the approaching Sector Fleet. After a few minutes' thought, he was reluctantly forced to the conclusion that he must send a copy to Britthouse also. The young fool's action in providing copies of his reports put him under the obligation of reciprocating. There was one advantage, he thought with some satisfaction: it would probably stop his fooling about down there.

Britt's party was just climbing out of "Jenny" at the head of the valley when the signaller in the *Hannibal* put through the second message. Sergeant Davys tore the strip from the machine and handed it to the Captain. He read it through twice, passed it to Mike and Bob, and sat down with a growl of exasperated fury.

"Isn't that like those blasted Interplan oafs?" he demanded. "Only one remedy for any trouble—bring up the heavy heaters and show who's the boss! Well, we're going down into that valley, and if we haven't finished our 'botanical researches' they can damn' well wait for us before they begin their blasting. Why can't they keep their interfering noses out? This is a Planetary affair."

"But the Sector Fleet won't act only on Japp's hunches, will they?" asked Bob innocently.

"If we haven't located the *Persephone* they will—if only to back up Japp against a Planetary 'ground-hog.' You don't know those braid-happy boys." He stood up impatiently and led the way to the ravine.

They were now at the uppermost limit of the vegetation, on the edge of the escarpment at the head of the valley, with the huge, dark-blue bowl of it extended beneath them. The yellow lake glistened and splashed in the foreground, little lemon-coloured wavelets winked and bubbled among the blue tangle at the shore, vertically beneath them. Beyond was the red lake—in harsh contrast with its ubiquitous blue border. Smaller in the distance were the green lake, the blue one, and just visible in front of the bright blue of the sea was a slash of vivid purple—the fifth and last.

"I'll never get used to it," declared Bob Crofton, "gives me a headache every time I look at it. You've got plenty of photographs Mike? If Japp and his gang burn this out of existence I want some evidence to prove this ain't no pipe-dream."

"Quit gossiping there and come see this," called Britt. At this point, the little stream, tumbling from the barren hills beyond, had gouged a cutting through the cliff edge, and flung itself hissing and boiling, down a steep natural chute into the yellow lake. The blue vegetation had sent its advance guard up the ravine: long blue tendrils, devoid of leaves, probed the full length of the vee-cut slope, seeking a purchase wherever a crack or crevice could be found.

"Have you ever seen a valley this shape in a geological area as old as this one?" asked Britt. Mike looked up and down the length of the steep-sided cut before replying. "No," he said at length, "it looks almost as though it had been cut out, but it's a bit ragged for that. Besides, who could have cut it out? D'you suppose Japp is right, after all?"

"I don't know," said Britt, "but I'm beginning to think that this is not quite a 'natural' formation, at least."

HE CLIMBED down the slope into the ravine itself, hampered by his protective suit and its domed helmet, but finding foot and hand-holds amongst the rocks and the tough blue vines.

He bent to hack off a portion of vine—a tendril tip—and paused suddenly in lifting a tangle of the thicker growth from the rock. There was a vein of ore beneath the plant, blue-black stuff that glistened metallically. He took a few pieces which had been loosened by the probing tendrils and climbed back out of the cleft. He showed the specimens to the others and instructed them to search the rest of the ravine to determine the general extent of the ore-bed. The two lieutenants looked at each other and shrugged mentally. Bill Britthouse had a reputation for finding significance in the most unlikely facts, but this seemed to be going a little too far.

While they were engaged in the arduous task he seated himself on the edge, doing nothing more than sitting and watching. By the time his disgruntled juniors had finished their search he had seen what he wanted—several portions of rock and a miniature landslide of rock and ore slid down the side of the cutting and were swept down the current into the lake.

"Well?" he said, when they returned.

"Covers most of the sides of the ravine," reported Bob, "It's a fairly thick seam, and the angle of the stratum is practically parallel to the bed of the stream."

"Good," said Britt, "take these samples of ore back to the *Hannibal* and do a flash spectro on them. I want the main metallic constituents, no more. Hurry." Bob departed in a state of complete mystification.

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"You come with me Mike," the Captain said, "and we'll take samples of the water in each of these darned lakes, together with the vegetation. I think we're getting some place at last."

Twelve hours later he was not so sure. They had worked like demons, five hours for a lightning tour of the valley in "Jenny," collecting samples, and seven hours of cramped and heated work analysing the samples in the tiny laboratory of the ship. Although the results made some sort of sense to Britthouse, the connection with the disappearance of the *Persephone* had not appeared. He sent his junior officers to bed and remained worrying over his problem. He, too, made a list to assist his thought processes, but it bore little resemblance to the notes Japp had used:—

1. Ore—Chromium.
2. Chlorophyll-equivalent—also Cr.
3. *Lakes*—Cr in sol'n. viz:- Yellow—alkaline; Red—acid; Green—alkaline; Blue—oxidised; Purple—intermediary for Chlorophyll-eq.
4. *Persephone*—????

Eventually he gave it up, hoping that a night's sleep would refresh his brain. Unfortunately, the following morning brought no inspiration, but only a stiff request from Japp that he vacate the "environs of the indicated area" within one hour, as the Sector Fleet was now arriving, and almost ready to begin operations.

"I'm damned if I will!" roared Britthouse, "Sergeant Davys, get 'Jenny' out. We're going to cruise up and down that valley until Japp is black in the face! I'll stay there till this is solved and he can blast me if he dares!"

FIVE MINUTES later the faithful Sergeant reported at the control-room with a very troubled face. "I'm sorry, Captain," he said, "but I'm afraid the 'Jen-'—the runabout is unserviceable."

"Why?"

"Corrosion, sir. The tracks are heavily corroded and the bearings have developed so much slack that they won't track properly."

"But that metal is practically incorrodible." "I know sir, that's why I wasn't sure the first day. But the juice that got into them yesterday has made 'em much worse."

"Juice? What juice?"

"The juice—the sap of these plants sir. The tracks have been running in it for two days. That is what has corroded them sir."

"Holy Smoke!" cried Britt, "Of all the double-distilled fools!"

"I'm sorry sir," said the Sergeant stiffly, "I didn't think it—"

"Not you Sergeant," cried Britt, "I'm the fool. O.K. Now we're got to move. We may just get them out before that dim-wit Japp starts up his heaters. Gimme that control-board Mike, this has to be quick."

"You know where the *Persephone* is?" demanded the startled Navigator.

"Sure," said Britt, grinning broadly, "at the bottom of the red lake."

There was no further opportunity for speech, as he flung the ship up from its berth on the escarpment and sent it screaming down the valley in a semi-circular sweep which ended abruptly with a stomach-lurching dip just above the green lake, facing upstream into the waterfall below the red one. The gunners were loading two torpedoes into the tubes when the message from the Interplanetary Fleet arrived. This was signed by no less a person than the

Admiral himself. It simply repeated Japp's earlier demand, adding that non-compliance on his part would be reported to "the appropriate quarters."

Britt delayed long enough to energise the overhead viewers, and they had a glimpse of the massed phalanxes of the Sector Fleet receding in perspective into the distant blue.

"Gosh but they look swell," admitted Britt. "Sirius knows what kind of goons are in them, but they build pretty ships. Pity to spoil their fun. Ready gunners? Fire." As the two delayed-action torpedoes plunged into the vulnerable end of the red lake he lifted the *Hannibal* up and back in a breathless *whoosh*.

Fifteen seconds later the end of the lake erupted in a great geyser of water and smoke. The end was blasted clean out of the lake. The damming vegetation was cut in two, and the pressure of water behind it flung open the gap until the whole lake was pouring through it.

"This should be good," said Britt, "watch where the two lots of water mix."

He was right—it was more than good, it was spectacular. Where the red water mixed with the blue there were huge clouds of steam. Fountains of boiling liquid, of brown and green muds, were flung bubbling into the air. Sheets of coloured vegetation were tossed to the sides, a thick steaming fog began to accumulate over the lower stretches of the valley. At this moment the signaller agitatedly announced that the Sector Fleet Admiral himself was on the screen, and would Captain Britthouse please take the call?

The Admiral's face was a study in icy contempt, "I must warn you, Captain Britthouse," he said, "that this childish attempt to anticipate my action will also be reported to your superiors. Would you please be good enough to remove your ship from my target area without any further delay?" Beneath the table, Britt had his fingers crossed—suppose he was wrong? He was watching his forward viewer intently, ignoring the image on the communications-screen. Then he saw what he was waiting for, and turned to the Admiral with a seraphic smile.

"Thank you for your valuable co-operation Sir," he said, "I would like to request you to hold your fire for a few moments longer, until the object now becoming visible in the second lake is definitely identified." Then he cut the connection and took the *Hannibal* down to the shrinking shore of the red lake. In the centre of the now diminishing sheet of water was a long mound. It was smothered in leaves and tendrils of dark brown growth, it was stained and blackened, but its outlines were unmistakable—the *Persephone*!

Gradually the water receded until she was completely uncovered. She was festooned with the weed, her plates were corroded and pitted, in parts her outer hull was eaten completely away. "Oh God!" groaned Mike, "there'll be nobody alive in her now." But even as he spoke a crow-bar point broke through the paper-thin hull. Soon the men inside had battered and chiselled a hole in the corroded metal, and clad in their space-suits were stumbling and slipping through the pools and the muck and over the dripping tangle of rubbery growth to where Britthouse waited, standing beside the *Hannibal*. They waved as they staggered forward, waved impartially to the Planetary man and the serried ranks of the Interplan Fleet high above. Britt stayed long enough to greet the first man ashore, he shook his hand, clapped him on the back, and touched helmets for a few brief words. Then he waved him towards the

Interplan flag-ship now settling her majestic bulk behind his own little craft, climbed into the *Hannibal's* hatch, and in less than two minutes was a vanishing speck in the sky.

"Quite simple," he was saying to his lieutenants, "in a way, old Japp was right you know, it *was* organised intelligence that moved the *Persephone*."

"But how . . . ?" "But where . . . ?"

"That plant," he said, "first specimen of intelligent vegetation in the universe. Remarkable." But his juniors were not going to let that pass unchallenged.

"Those plants—that plant intelligent?" they demanded. "How do you know? It doesn't *do* anything."

"And what sort of things would you expect an intelligent vegetable to do?" demanded Britt. "Wear a diploma? Or pull up its roots and walk about pretending to be an animal? An intelligent vegetable is still a vegetable, you cretins. It does all that any self-respecting vegetable needs to do—it eats. And vegetables eat minerals. This one ran short of chromium—which it needs for its own kind of chlorophyll—so it followed up a source of supply. Followed it upstream from the sea until it located the original ore-bed. Then it *mined* its chromium ore and turned the river into a chemical factory to process it into the form it needed. Those lakes were its wash-tanks and vats. It produced its acids and alkalies out of specialised cells."

"But what about the *Persephone*?"

"That had me, for a while. Then we discovered the sap would corrode chrome steel. The *Persephone* must have crushed quite a lot of sap out when she landed on the plant, and it soon got wise to the fact that here was a colossal hunk of metal which contained a huge percentage of chromium. Furthermore, it was lying right beside its acid-vat. So what does it do but puts on a terrific effort of growth and rolls this gift from the gods straight into the tank to be dissolved."

"Good job we drained the lake in time," said Bob.

"They were in no danger from the plant," replied Britt, "they would have reserve air and food for weeks. I suppose the hatches must have jammed so they couldn't get out. Anyhow, all they had to do was to wait till the plant released 'em by dissolving away the hull, then float ashore in their space-suits. Their danger was from that damned Greek, Japp. The Fleet's heavy heaters would have boiled them alive in ten minutes."

"Greek?" said Michelson, "is he Greek, then?"

"Oh, don't you know?" chuckled Britt, "Listen. There was once a party of Greek thinkers—this was around the time of Aristotle—who sat up all night having a furious argument about the number of teeth in a horse's mouth. Unable to agree, they went out and collared a passer-by—an Arab, it happened to be—and persuaded him to arbitrate. He listened attentively to all their arguments, and then without saying a word he walked away. He returned in a few moments, however, and told them the correct answer. 'How did you decide?' they cried. 'Whose was the better argument, the sounder logic?' 'Logic be damned,' he says, 'I've just been round the back to the stable and counted 'em.'"

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